Modern packaging

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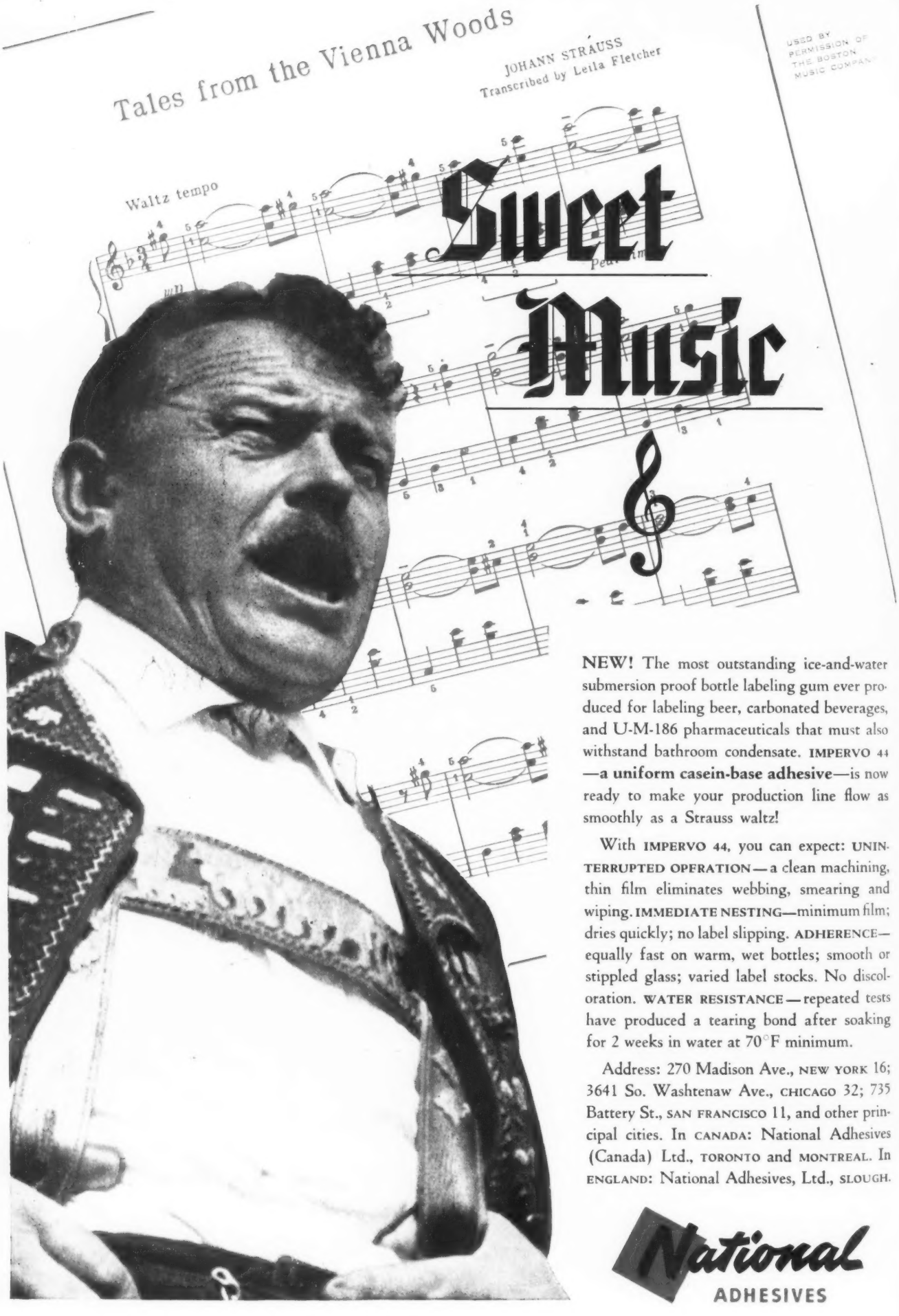
TECHNOLOGY DEPARTMENT

Nominated for packaging's Hall of Fame. Story on Page 104

June 1949

Carton overwrap: No. 450 MSAT DuPont Cellophane, printed in Shellmar's Colodense Pro 685

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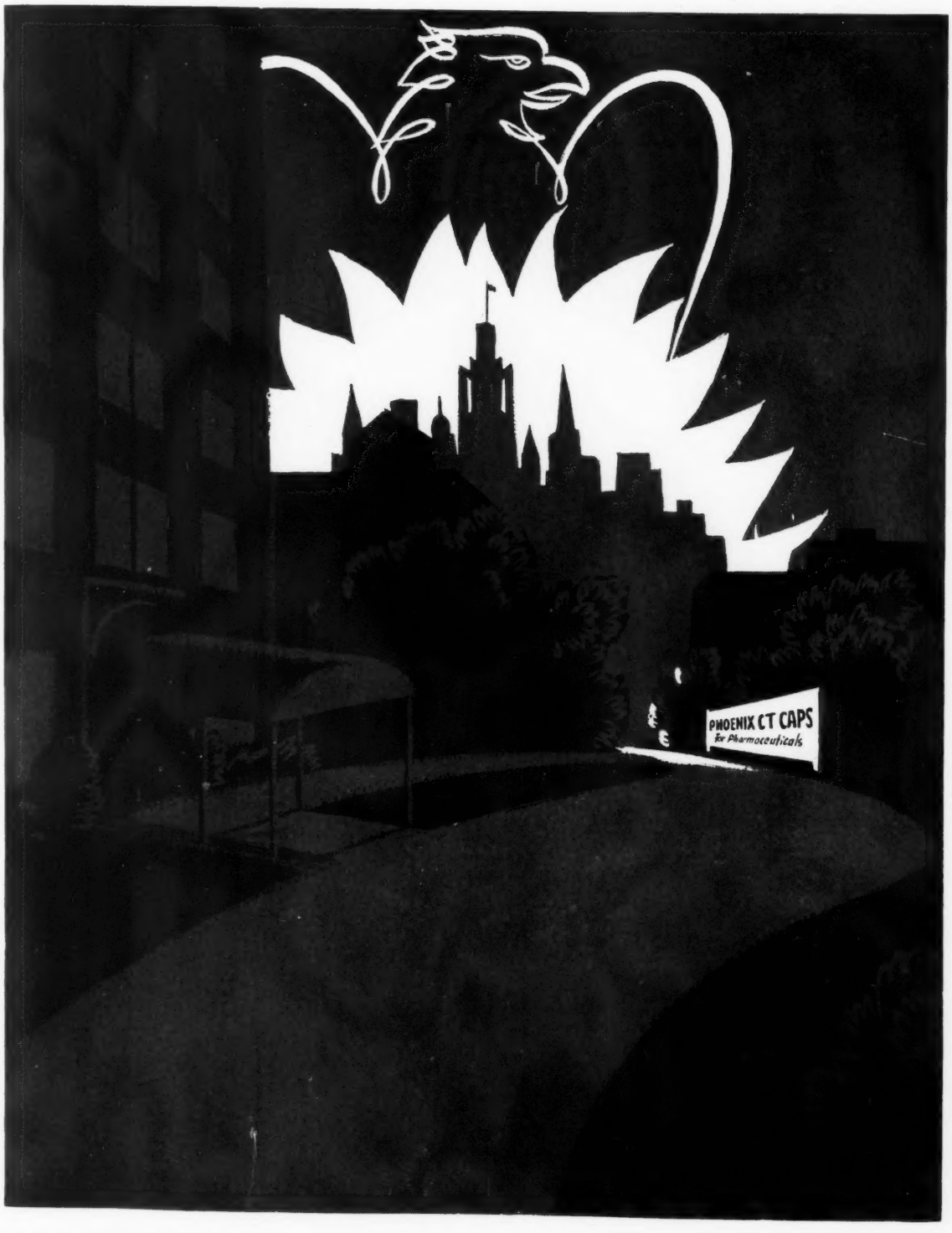

PHOENIX METAL CAP CO. ★ *Metal Caps for Glass Packages* ★ Chicago 8, Brooklyn 18

Modern packaging

Vol. 22 No. 10 June 1949

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On wrappings and box papers, a simple but memorable design is an inexpensive means of building brand recognition; the practice is spreading in all fields.

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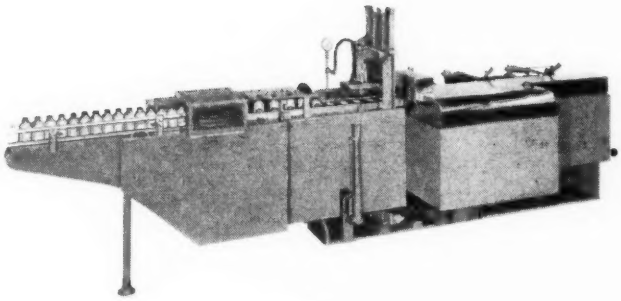
BOTTLES OR TUBES...LIQUID OR CREAM...

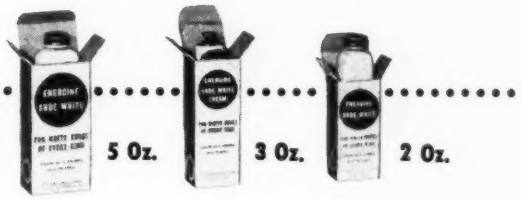
ONE

REDINGTON

CARTONS *BOTH* KINDS
AND ALL 3 SIZES

ENERGINE SHOE WHITE
"for white shoes of every kind"





INSTANT ADJUSTABILITY to accommodate different sizes—that's just *one* of the many outstanding Redington features! By simply moving numbered markers on this machine to designated positions, the Cummer Company Division of Sterling Drug, Inc., manufacturers of famous Energine Shoe White, are able to change-over quickly from cartoning their 2-oz. bottles, to their 5-oz. size . . . or to their 3-oz. tubes . . . exactly as they please.

OTHER outstanding advantages offered Energine, and a long list of leading U. S. package-goods manufacturers by Redington Cartoning Machines, include: continuous loading mechanism . . . vari-speed drive . . . safety shut-off . . . turned and ground shafting . . . and other cost-cutting quality-cartoning innovations. Why not put them to work for you—*now!*

OPERATION: Bottles. Energine cartons in collapsed form are stacked in a magazine on the machine. Bottles, after they have been filled, capped and labelled, are fed onto intake conveyor belt side by side, standing upright. Machine places bottles on their backs in pockets of intake conveyor. Cartons are fed by machine from magazine, formed, the bottles inserted, and the cartons closed by tucking in end flaps. (Tuck-in portion of bottom end flaps of 5-oz. bottle cartons are spot glued.) Space on intake conveyor is provided for mohair daubers that are placed, one in each pocket with the bottle manually, so that it is inserted with bottle into carton.

OPERATION: Tubes. These are placed directly in the pockets of intake conveyor belt manually, with daubers included and handled in the same manner as with the Energine bottles.

CODING. As each Energine carton passes through machine, it is code dated without ink by impressing code date into the carton where indicated.

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PACKAGING AT ITS BEST

PACKAGING IS A BUSINESS that thrives on competitive conditions. True, the volume of sales of most packaging supplies has dropped below the peak of the immediate postwar years. But that was a lush and lazy business—no challenge to enterprise and inventiveness, which normally operate constantly to extend the frontiers of packaging and stimulate demand for all packaged products.

That packaging activity is back to its normal, healthy best was convincingly demonstrated at last month's National Packaging Show. To say that this was the biggest, most active packaging show ever held is true, but does not tell the story. It was necessary to be there to appreciate that suppliers once more were *selling* and users once more were *buying*—not recklessly, as in the boom times, but avidly and intelligently.

It served to remind us once more that packaging, as a business, comes pretty close to being depression-proof. At least, it never gets dull. In boom times, of course, everybody is busy. But when the demand for his products begins to slacken and a growing downward pressure on prices is felt, the manufacturer looks immediately to packaging for help on both scores. And that's when packaging really rolls up its sleeves and goes to work.

The 11,000 serious-minded businessmen who thronged Atlantic City's Convention Hall last month were there to find (1) improvements in design and construction and materials that would make their packages more attractive to today's selective buyers and (2) new machinery to cut production costs. Generally, they found them.

The resourceful packaging supplier can make a big contribution toward the solution of today's problems. He has only to tell his story—not just once a year, but continuously—to find an alert and attentive audience. The economic forces are all in his favor.

The Editors

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METALAM is supplied in rolls or flat bags.

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*Reg. T. M.

Produced under Ivers-Lee Patents Nos. 2121988, 2230849, 2125321.

Self-selling packages in processed films and foils

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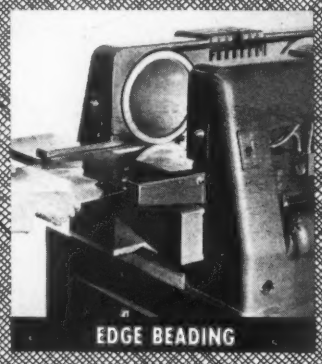
180° FOLDING

DRAWING COVERS

WELDING CYLINDER


EDGE BEADING

CYLINDER END-BEADING

DRAWING CONTAINERS

THERMOBEADER SINGLE-EDGER, MODEL 128-1 . . . Provides an automatic continuous method for beading straight edges of sheet stock, roll material, die-cut blanks and strips at a rate of 500″ to 1000″ per minute. Forms nine different standard-size beads; fully adjustable for accommodating various thicknesses ranging from .005″ to .020″.

THERMOBEADER DUPLEX, MODEL 128-2 . . . For double-edge beading, forms two parallel edges simultaneously; fully adjustable for handling sheet stock ranging from 2″ to 20″ wide.

90° THERMOFOLDER, MODEL 123 . . . Forms a 90° crease in sheet plastic material from .005″ to .020″ thick up to 30″ wide. Enables you to fold in either rubber or metal dies, eliminates over- or underfolding. Ball bearing action, a pleasure to operate.

180° THERMOFOLDER, MODEL 103 . . . Forms U-Type, 180° fold, with sides tight together, without tearing, cracking, or opening up. Provides controlled folding cycle that enables average operator to produce 500–1000 single folds per hour in material of .005″–.020″ thickness and up to 18″ wide.

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THERMODRAW PRESS, (EL-HYDRO) MODEL 119 . . . Forms seamless cylindrical containers and covers up to 10″ diameter.

HF PLASTIC WELDER, MODEL 137 . . . Forms and welds lap joint cylinders with high frequency electric current. Capacity 1½″ to 8″ in diameter and 1½″ to 5″ long. Also welds corners of square boxes.

THERMOCURLER, MODEL 135 . . . For beading ends of lap-joint cylinders 1½″ to 8″ in diameter and 1½″ to 15″ long. Hand-fed, fully automatic companion machine to Taber Thermoseamer.

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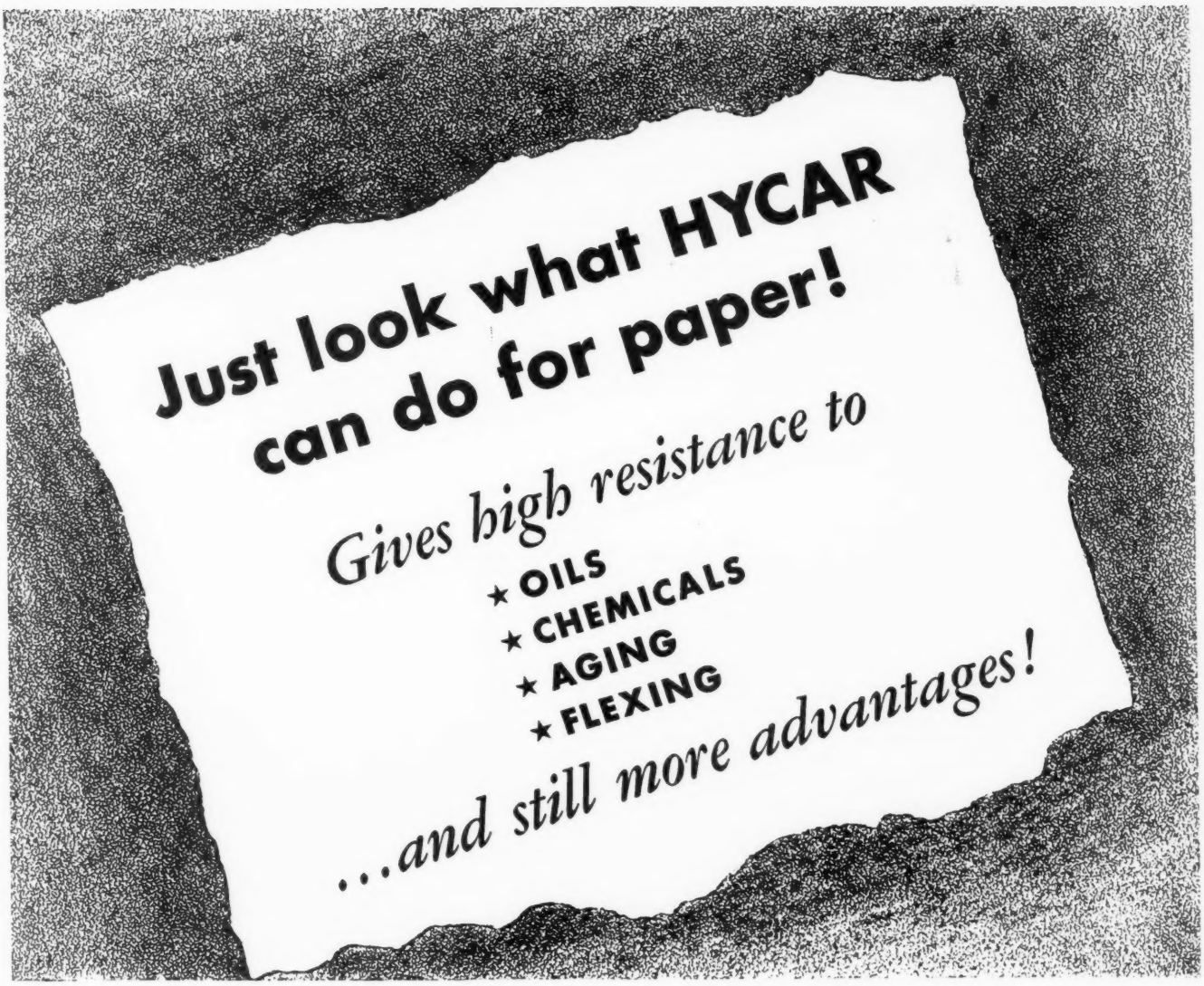

★ Hycar American Rubber Latex, used as a coating or impregnant, gives paper new properties that make possible a wide range of profitable applications.

It makes paper highly resistant to many damaging factors. It increases tear and wet strength—makes soft but strong smooth-draping sheets.

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We will be glad to work with you on applications or problems relating to the use of Hycar latex. For more information, please write Dept. HG-3, B. F. Goodrich Chemical Company, Rose Bldg., Cleveland 15, Ohio.

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American Rubber

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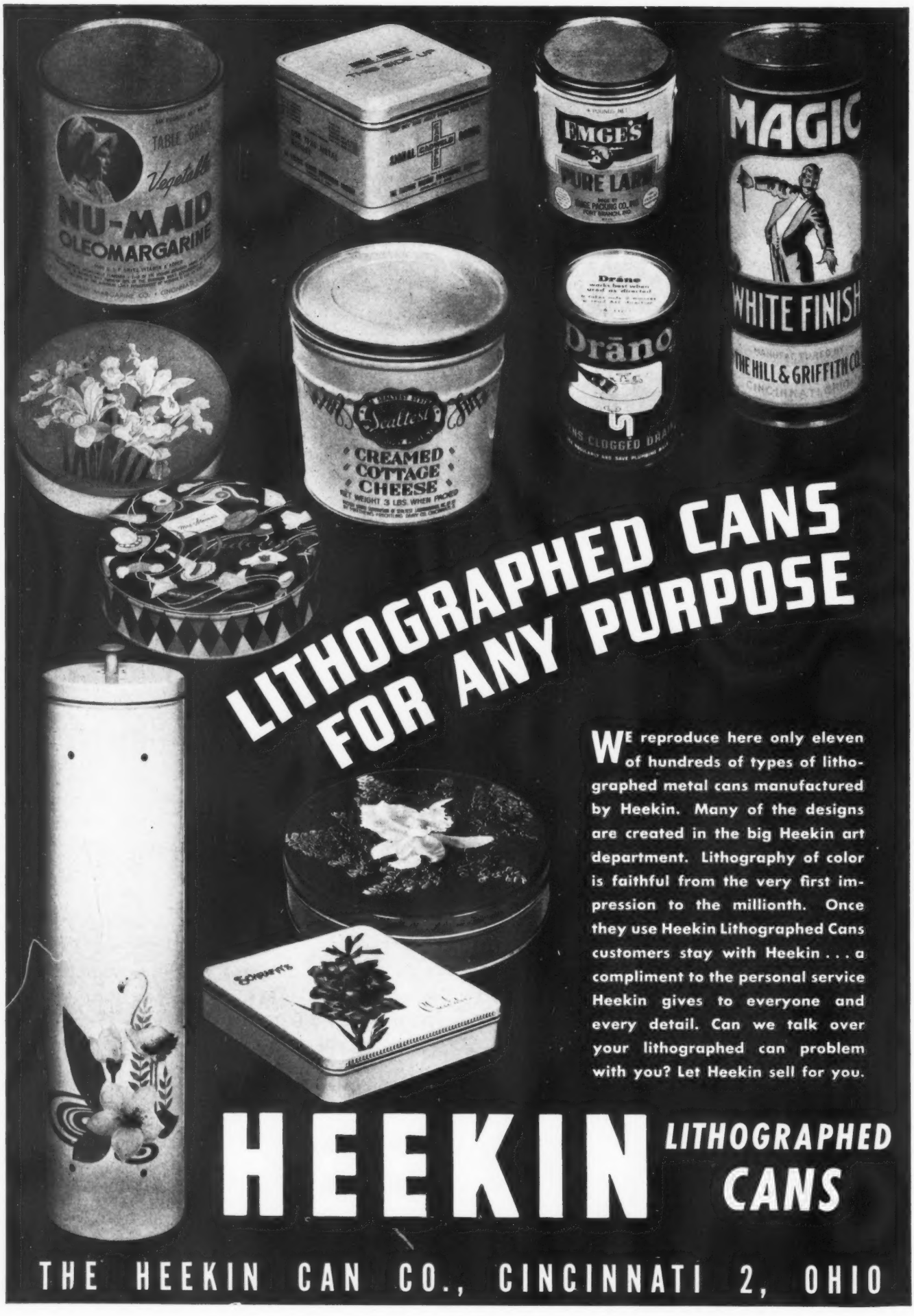
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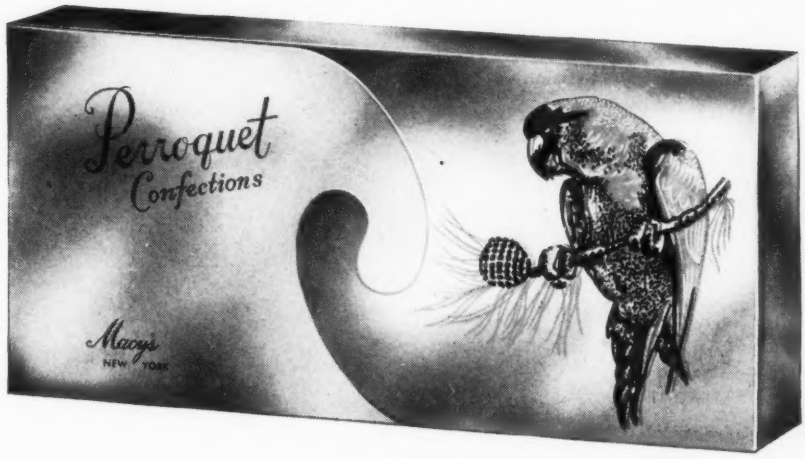
THE HEEKIN CAN CO., CINCINNATI 2, OHIO

Macy's LEADS AGAIN with SMART *Foil* BOX



★ One of a series of distinctively styled boxes recently designed for Macy's by Lambert Dusseau and Emily Oppa and produced by United.

When Macy's, one of America's smartest merchandisers, uses Foil Cartons, you can bet your bottom dollar that Foil Cartons *Sell Goods Faster.* Because Foil attracts more eyes . . . It influences more buyers and makes your cash register ring more frequently. Let United prove to you how Foil Cartons can step up your sales and increase profits. Send us your present folding box or display carton for suggestions. You assume no obligation.

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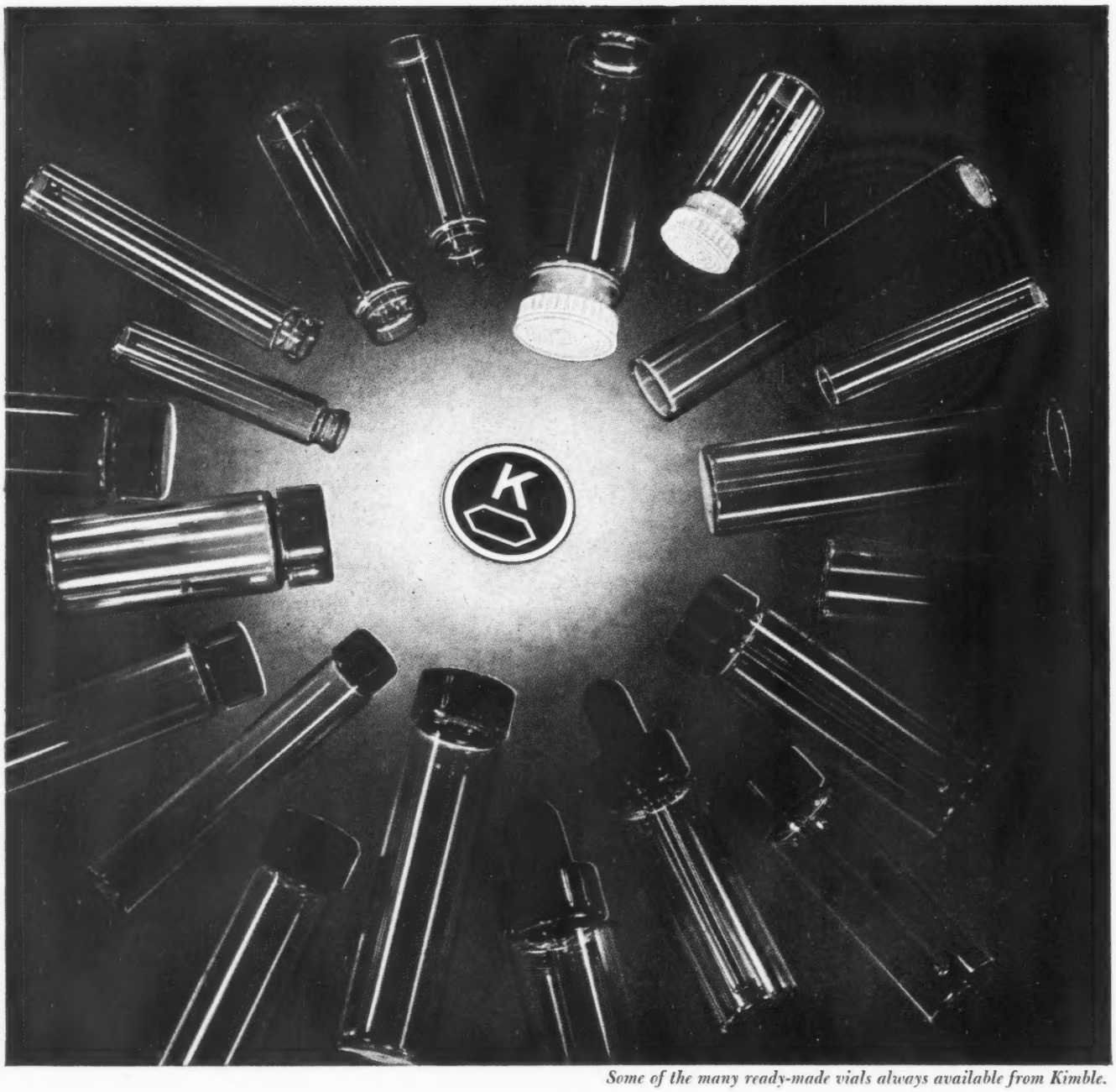

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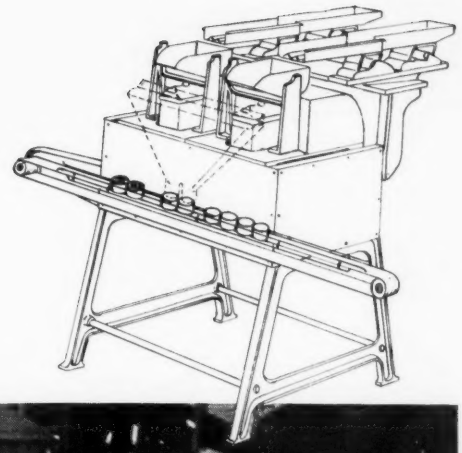
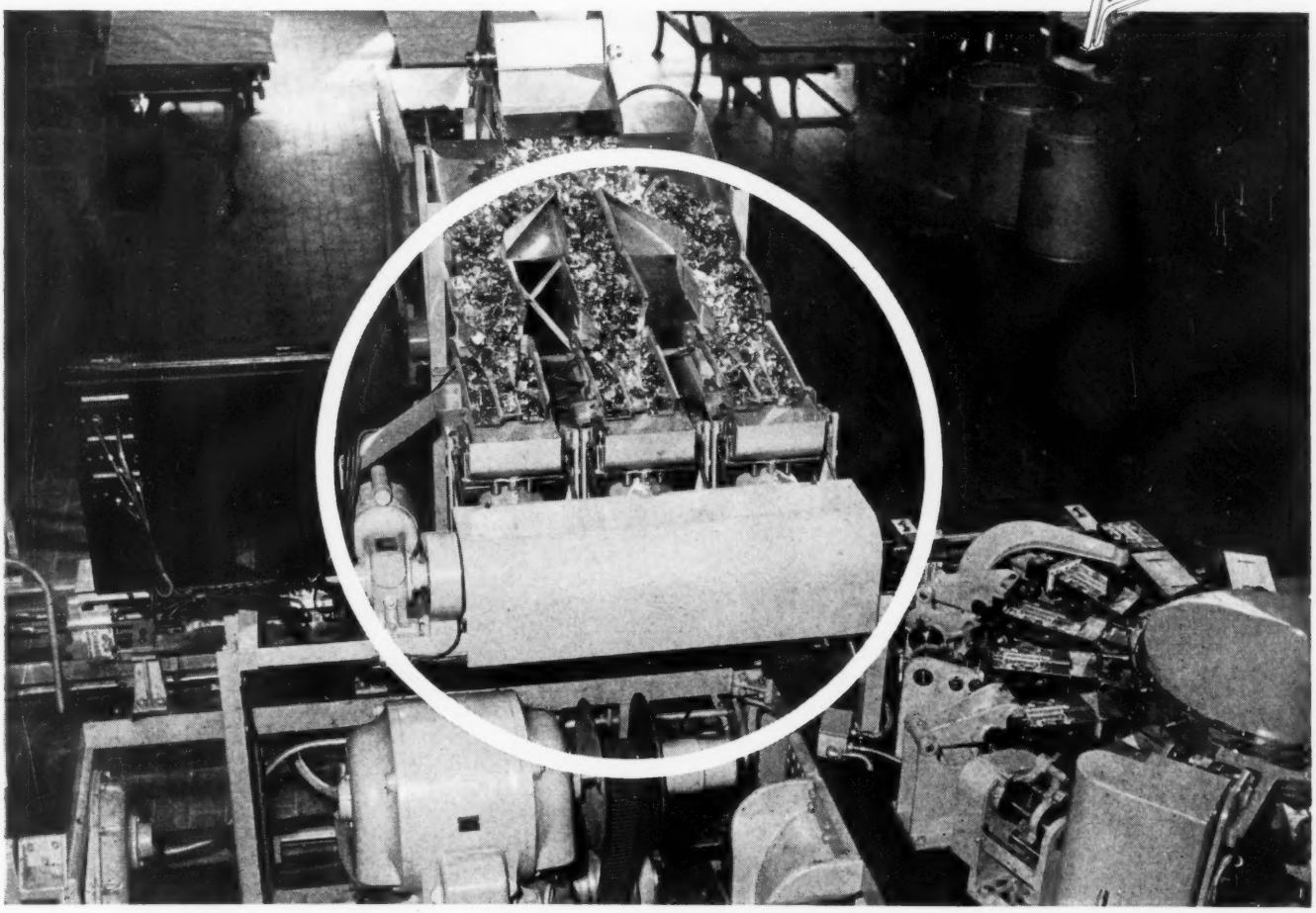
KIMBLE GLASS TOLEDO 1, OHIO

Division of Owens-Illinois Glass Company

Packaging Show Hit:

Wright's new Hy-Tra-Lec Automatic Weigher Model "M" was shown for the first time at the Packaging Exposition. Seen in action by thousands were two machines—one weighing and filling candy, and the other weighing and filling wood screws. If you were unable to attend the Show, write now for literature. Get the facts about this new machine which net weighs and fills free-flowing dry products at high speeds with superior accuracy.





. . . reduce your costs

You have heard packaging experts discuss Wright's Hy-Tra-Lec Automatic Weighers. The principles incorporated in these machines are new in automatic packaging. "Positive displacement" is used rather than beam or spring scales. Definitely, a marked technical departure from conventional weighing methods. Definitely, a cost reducer as proved in more than 100 customer plants.

Yes, if you package free-flowing dry products, Hy-Tra-Lec warrants investigation. Costs are reduced by net weighing at high speeds with superior accuracy. Range: One-half ounce to 16 ounces. Available with one, two, three, or four weighing heads. Send an ample quantity of your product for testing purposes and we will give you a prompt report.

WRIGHT
MACHINERY COMPANY
EST. 1893 · DURHAM, NORTH CAROLINA
SUBSIDIARY OF THE SPERRY CORPORATION

BETTER

FASTER

MORE PROFITABLE PRINTING

DEPEND ON THE LEADER

Graphic Arts and packaging men are now required to print dozens of stocks, at speeds unheard of 20 years ago. Cellophane, pliofilm and glassine are a few that pose difficult technical problems. Versatility must be designed into printing equipment . . . presses must perform many jobs and perform them well, if printers are to meet the varying demands of today's production profitably.

For more than 20 years, Champlain alone has designed versatility into printing and fabricating units. We are in the best position to help you solve the problems of varied as well as straight line production, with lowest capital investment and at lowest possible operating cost.

Champlain rotogravure is known the world over . . . it prints and dries 5 colors in 5 seconds with highest quality on a wide variety of stocks – Champlain's new line of aniline presses, specially designed for the converting and packaging fields, can't be touched by any other press for board, foil, cellophane and pliofilm.

For in-line production with Champlain printing units there is a complete line of fabricating equipment for slitting, multiple roll rewind, perforating and scoring, embossing, gluing and punching and dieing. The fact that fabricating equipment, like the printing presses, is unit built gives you versatility through interchangeability.

Send samples of your production to us – let Champlain show you how to do the job–better, faster, more profitably.

"DEPEND ON THE LEADER"

CHAMPLAIN COMPANY, INC.

88 LLEWELLYN AVENUE, BLOOMFIELD, N. J.

Chicago Office: 7 W. Madison St., Chicago 2, Ill.

ROTOGRAVURE AT ITS BEST

Here are some advantages of CHAMPLAIN ROTOGRAVURE

- NO MAKEREADY
- INSTANT DRYING INK
- NO PRESS WASHUP
- ELECTRONIC OR PUSH BUTTON REGISTER CONTROL
- MULTICOLOR PRINTING ONCE THROUGH PRESS

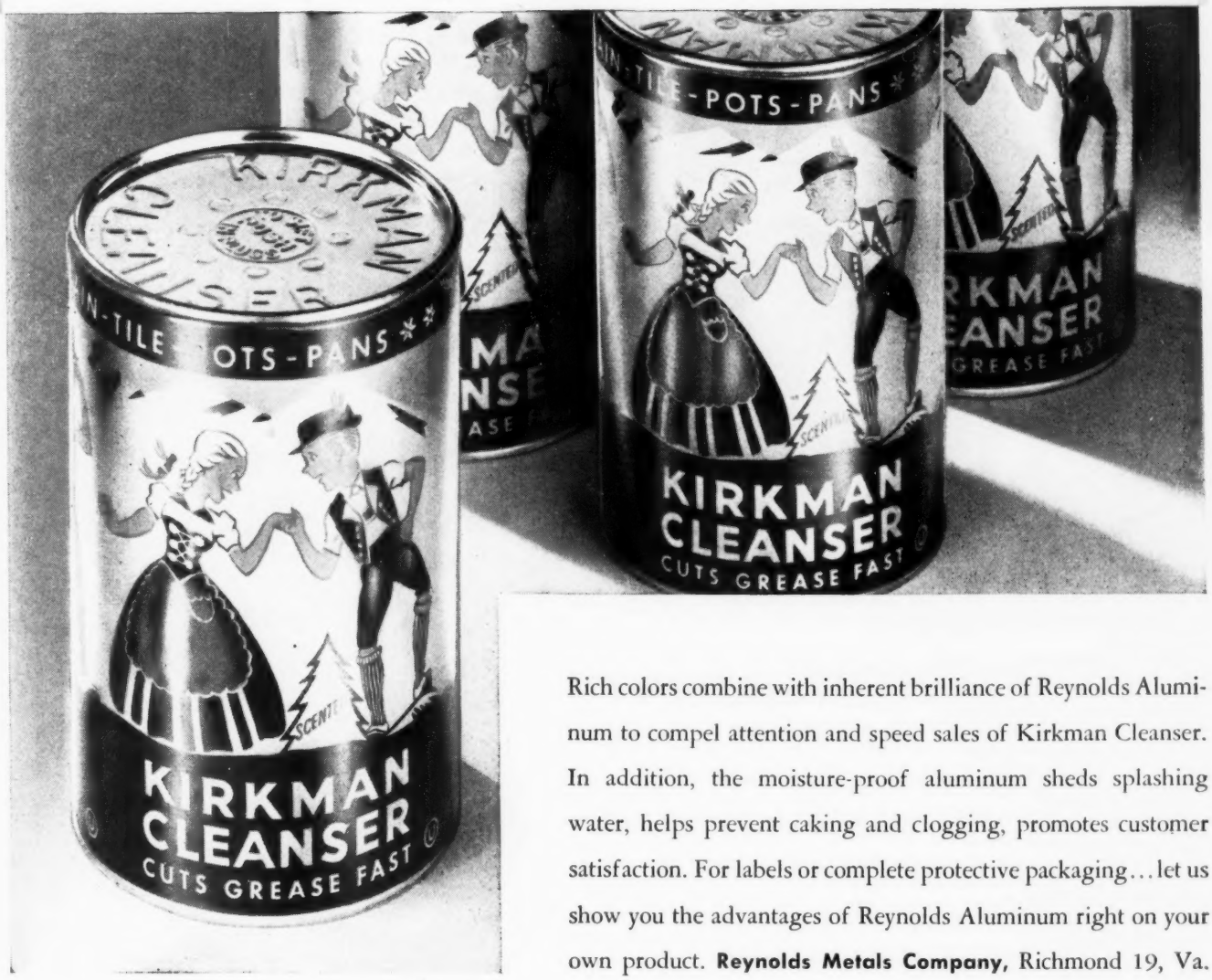
5184

CLEANS - POLISHES - ENAMEL - PORCELAIN - TIL
SCENTED
KIRKMAN CLEANSER COUPON
Void if taxed, restricted or forbidden by law in your state. Cash value 1/20. Not transferable and not redeemable by brokers. Redeemable by final purchaser only.
KIRKMAN & SON DIVISION of Colgate-Palmolive-Peet Co.
BROOKLYN, N. Y. MADE IN U.S.A.
For catalog write to
PREMIUM DEPT., BOX 470
JERSEY CITY 3, N. J.
VALUE 1 COUPON
KIRKMAN REG. U.S. PAT. OFF. NET WEIGHT 13 OUNCES
KIRKMAN CLEANSER
CUTS GREASE FAST Ⓤ
CLEANS - POLISHES - ENAMEL - PORCELAIN - TIL

Raise this tip-on and see this Reynolds aluminum label in actual use on Kirkman Cleanser

REYNOLDS METALS

REYNOLDS ALUMINUM



Rich colors combine with inherent brilliance of Reynolds Aluminum to compel attention and speed sales of Kirkman Cleanser. In addition, the moisture-proof aluminum sheds splashing water, helps prevent caking and clogging, promotes customer satisfaction. For labels or complete protective packaging... let us show you the advantages of Reynolds Aluminum right on your own product. **Reynolds Metals Company,** Richmond 19, Va.

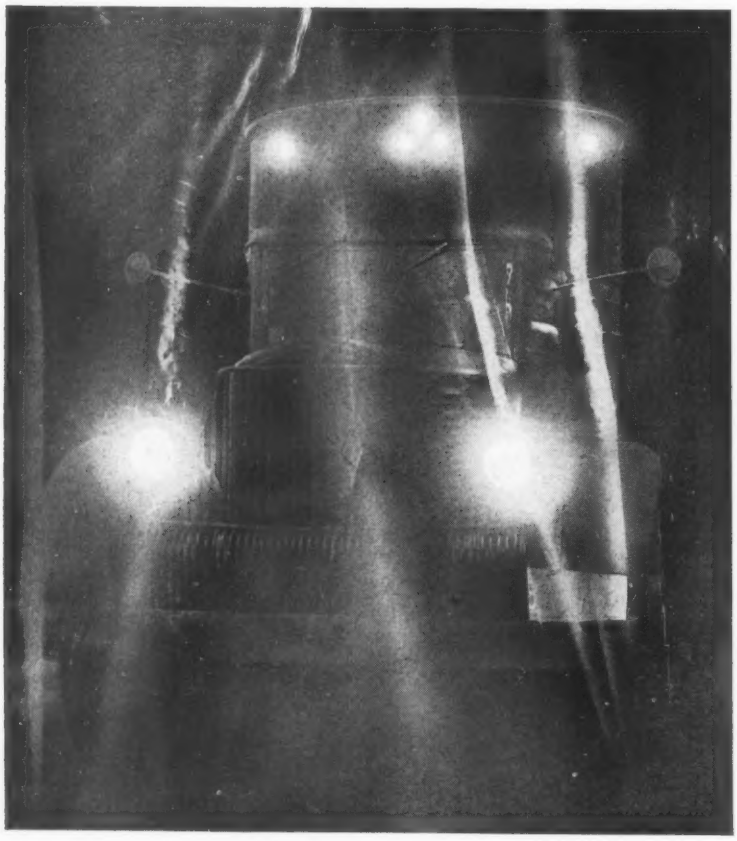
Raise this tip-on and see this Reynolds aluminum label in actual use on Kirkman Cleanser

REYNOLDS METALS

REYNOLDS ALUMINUM

TUPPER!

Wider than a 15 Ton Truck . . .



but only 1½ Mils thick

A country highway. Night. Black as the inside of your vest pocket. Out of the black and into the beam of your head lamps leaps a Behemoth of the night—the big boys are rollin'. Charging straight "into the camera"—at you! It looks, and is, wide . . . wider than the car you're driving and, you hug the side of the road. But it isn't as wide as

TUPPER Poly-T continuous Film and Sheeting 96 inches–(8 feet) wide.

7½ feet—90 inches

8 feet—96 inches

TUPPER

This is a Saga of achievement. In it you will recognize names and things familiar to you, of themselves. As they are mentioned, their relation, each to the other, and the naturalness of that which resulted from their association, will become apparent.

For, this is how Poly-T (trade mark), film and sheeting, wearing the bright guerdon of achievement-fulfilled, came to you in a width about which men had dreamed, without realization, 'till now.

The theater of operations is that great State of Texas, endowed so richly with those geographical, climatic and spiritual values and resources so vital to the realization of the visions of stout hearted men and their labors.

There is the fabulous name of Tupper, originator of Tupperware and other products, used and treasured the world over — and now presenting another of the "firsts" for which it has become famous, far forward in the ranks of that shining group of leaders in the fellowship of chemicals and plastics also choosing Texas as the locale for their greater development.

And so, again, as the Conquistadores, more than a hundred years before the Founding Fathers, a name came out of the East into the West and under the banner of Tupper-Texas, Inc., brightened its own fair name and that of the new country from which is drawn fresh virility and inspiration.

Working with top flight engineers of the Dupont Company; using Dupont Polythene and employing equipment built especially to Tupper specifications, by the Hartig Engine and Machine Company, the plant and laboratories of Tupper-Texas, Inc., presents this "first" — a "first" anywhere . . . in any man's language.

. . . TUPPER Poly-T (trade mark) continuous film and sheeting, 96 inches (8 feet) wide, 1½ mils and up in thickness, for all accepted film purposes such as packaging, industrial and scientific applications . . . and for many, many consumer products.

Too, this achievement places Tupper in the strategic position of possessing the material source from which we shall print and ornament; form into tubes, bags, drapes, curtains; the largest sizes of bed spreads, table cloths, slip covers . . . any conceivable article to be fabricated from film or sheeting.

At the moment the quantities available will be limited, and possibly for some little time to come, due to the extreme shortage of raw materials. So it is recommended that correspondence be initiated promptly, that you may not be disappointed in participating in this really great new development of an organization so well known for its alertness to the needs of the present and . . . anticipating those of the future.

TUPPER CORPORATION

Manufacturers of — CONSUMER, INDUSTRIAL, PACKAGING AND SCIENTIFIC PRODUCTS

FACTORIES: Farnumsville, Mass., and Cuero, Texas **New York Show Rooms 225 Fifth Ave.**

ADDRESS ALL COMMUNICATIONS TO: Development Department A

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CHAMPION

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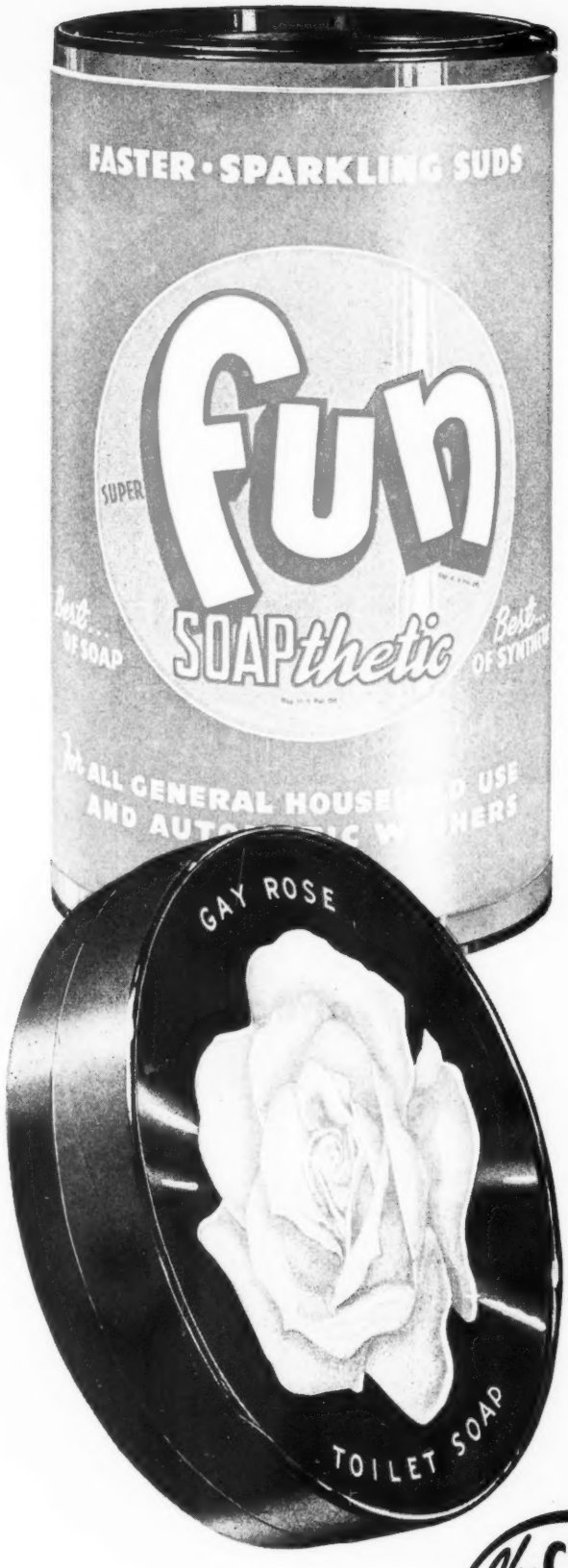
CAST COATED PAPER

for flawless reproduction and lasting beauty

THE CHAMPION PAPER AND FIBRE COMPANY • HAMILTON, OHIO

District Sales Offices: NEW YORK, CHICAGO, PHILADELPHIA, DETROIT, ST. LOUIS, CINCINNATI, ATLANTA, DALLAS, SAN FRANCISCO



CLEVELAND CONTAINER.... *Packaging*

designed to meet today's needs

There is always ONE LEADER no matter how competitive the field may be.

Eye-compelling attractiveness is always at a premium.

Our flexibility in production is keyed to meet changing conditions, just as our nearby plant production enables us to work closely with you from designing to deliveries.

Our Creative Design Dept. is at your service . . . our nearby field representative awaits your inquiry.

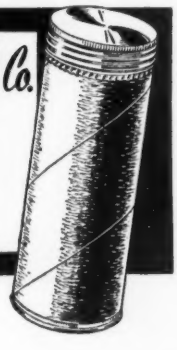
Investigate the potential in good packaging

The CLEVELAND CONTAINER Co.
6201 BARBERTON AVE. CLEVELAND 2, OHIO

- All-Fibre Cans • Combination Metal and Paper Cans
- Spirally Wound Tubes and Cores for all Purposes
- Plastic and Combination Paper and Plastic Items

★ ★ ★

PRODUCTION PLANTS also at Plymouth, Wisc., Ogdensburg, N. Y., Chicago, Ill., Detroit, Mich., Jamesburg, N. J.
PLASTICS DIVISION at Plymouth, Wisc. • ABRASIVE DIVISION at Cleveland, Ohio
SALES OFFICES: Room 5632, Grand Central Terminal Building, New York 17, N. Y., also 647 Main St., Hartford, Conn.
CANADIAN PLANT: The Cleveland Container Canada, Ltd., Prescott, Ontario Sales Offices in Toronto and Montreal



Gravure

FOR FOLDING CARTONS

by CHICAGO CARTON COMPANY

IS NO LONGER AN EXPERIMENT.

It is available today from presses which have been *producing* in our plant for the past eight years.

WRITE TODAY FOR PRODUCTION SAMPLES OF CHICAGO CARTON GRAVURE

CHICAGO CARTON COMPANY

4200 S. Crawford Avenue
Chicago 32, Illinois

Folding Cartons . . . Plain, Printed, Laminated, Paraffined

"open-and-shut case" for more sales

Today's consumers are wary of products in glamorous yet flimsy *throw-away* containers. That's why the package with the plus feature of re-use utility can give your product a strong competitive edge.

For instance? Look at this molded plastic sun glass case. Serves both as a pre-purchase "show window" and a post-purchase carrying case. Columbia designing and engineering created this marvel of packaging efficiency. Press—it snaps open. Click—it snaps shut. The mottled plastic base with clear plastic top is swung by Columbia-patented hinges.

May we "package" more sales for you?

Columbia

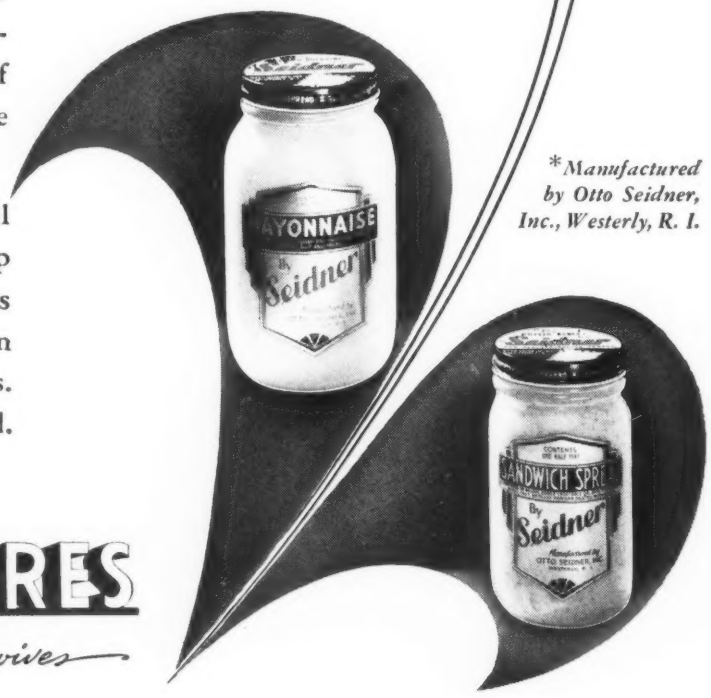
COLUMBIA PROTEKTOSITE COMPANY, INC., CARLSTADT, N. J.
New York Showrooms: Empire State Building

COLUMBIA 25th ANNIVERSARY

*Summer time is picnic time... and time for salads and sandwiches. That's when the call goes out for *Seidner Mayonnaise and Sandwich Spread. These products have a flavor that makes a picnic lunch something to remember.*

Crown Screw Caps are used by Otto Seidner, Inc. as closures of these fine products. Like hundreds of other food and drug packers, Otto Seidner, Inc. has found that the precision manufacture of Crown Screw Caps is an assurance of sealing dependability, as well as trouble-free application on the production line.

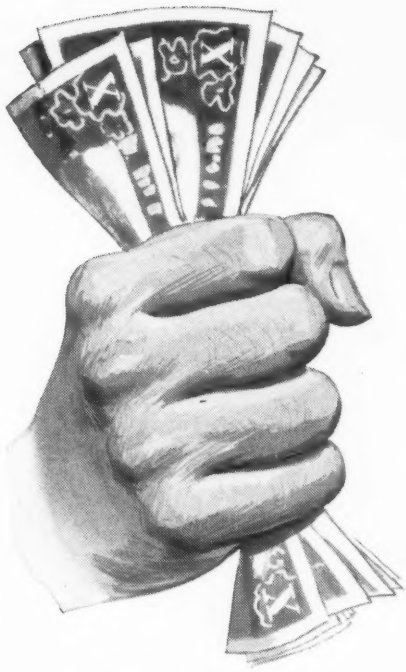
Why not let one of our representatives tell you all about these caps . . . the patented Deep Hook Thread . . . the specially developed liners . . . the durable decorations. It's a combination you just can't beat for satisfaction in closures. Crown Cork & Seal Company, Baltimore 3, Md.
World's Largest Makers of Metal Closures.



**Manufactured by Otto Seidner, Inc., Westerly, R. I.*

CROWN CLOSURES

Approved by millions of housewives



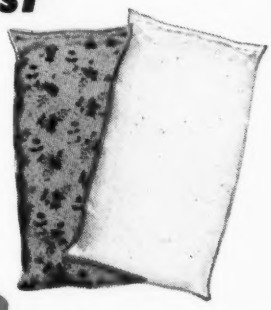
let's be selfish

wherever you are....

cotton bags

are your lowest-net cost

container...



..and unselfish

you are helping to keep down the

cost of living by using cotton bags

LET'S BE SELFISH: Fine quality Cotton Bags are your lowest net-cost container. They are easier to handle, stack, and store. They provide better protection. The gleaming white or colorful patterns assure much better appearance.

. . . AND UNSELFISH: They have high salvage value. Housewives the country over want them because they make their precious budget dollars go much farther. Furthermore, there is a reliable Cotton Bag Buyer near you who will make firm offers in advance . . . 60 days or more.

We will quickly provide his name or address. Or, if you prefer, we will have him get in touch with you. Write us . . . Write us TODAY.

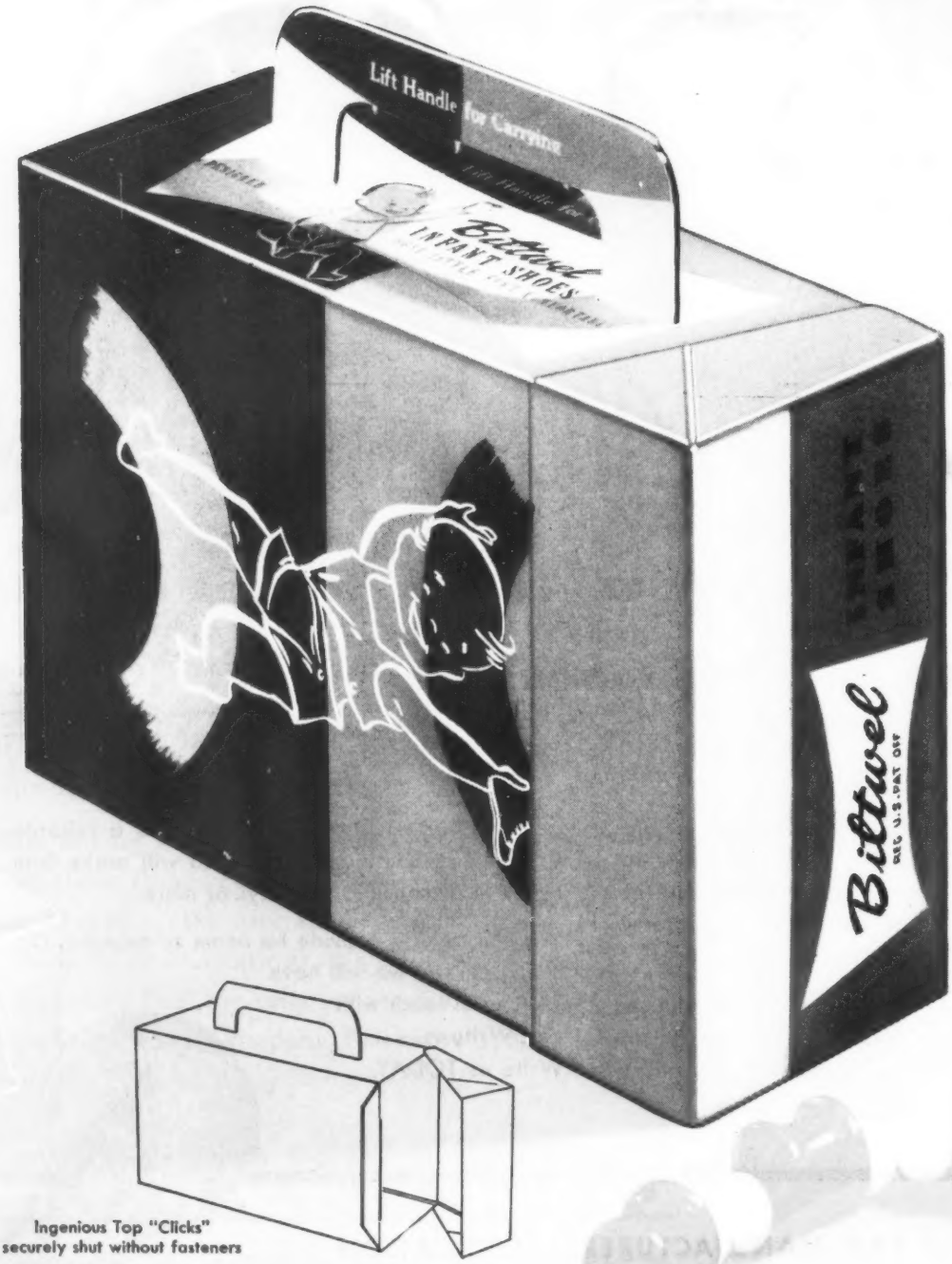
Textile Bags— Best OVERALL

TEXTILE BAG MANUFACTURERS ASSOCIATION

611 Davis Street • Evanston, Illinois

Another Example

OF GARDNER PACKAGING INGENUITY . . .



Ingenious Top "Clicks" securely shut without fasteners

he tiny "Suitcase" for Biltwel Baby Shoes

It makes children's shoes "walk out of the store" for the world's largest general retailer!

A firm doesn't become the world's largest retailer in its field by passing up any merchandising bets, so it was only natural that Sears, Roebuck and Company should decide to do something about repackaging their Biltwel Infant Shoes. They wanted a box that would package the shoes and pack a sales punch at the same time—and they put the problem up to Gardner.

Our designers came up with a striking folding carton made of famous *Coated* Lithwite, printed in eye-catching baby pink and blue. In addition, they built into it an ingenious top that "clicks" securely shut without fasteners, plus a fold-up handle that transforms the carton into a tiny "suitcase." Little toddlers love to carry it from the store. And that, of course, saves handling and wrapping expense. What's more, this bright, new package actually costs *less* than the former, unimaginative boxes. As for sales—judging from the reorders, Biltwel Infant Shoes are moving at a mighty fast clip!

Maybe We Can Increase YOUR Product's Sales-Appeal

Do you have an old package that needs dressing-up for today's self-selling trend? Do you have a new idea that needs a new *packaging* idea, or a product that's never been packaged? Let Gardner tackle your problem. Your inquiry will be welcomed. No obligation, of course.

MAKE MORE EYES REACH FOR YOUR PRODUCT IN CARTONS OF *COATED* LITHWITE*

Sears, Roebuck and Company, like so many pace-setting merchandisers, takes full advantage of the extra eye-appeal of *Coated* Lithwite, the quality clay-coated board that's whiter . . . brighter. Colors hold up brilliantly on *Coated* Lithwite . . . pictures reproduce with true-to-life realism. Rub-resisting. Fade-resisting. Both cartons of *Coated* Lithwite or *Coated* Lithwite Paperboard are available.

THE GARDNER BOARD AND CARTON CO.

Formerly The Gardner-Richardson Co.

Manufacturers of Folding Cartons and Boxboard, Middletown, Ohio

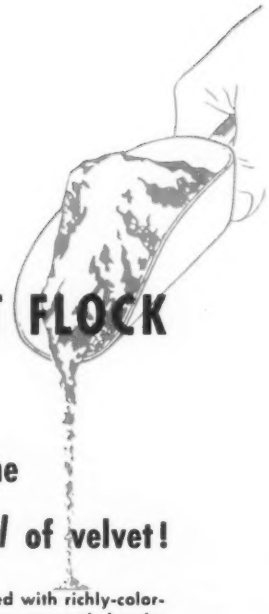
Sales Representatives in Boston, Chicago, Cleveland, Detroit, New York, Philadelphia, Pittsburgh, St. Louis

*Reg. U. S. Pat. Off.

Don't let this happen to You!

*For the want
of FLOCK
a Package
was Lost
For the want
of a Package
a Sale
was Lost
For the want
of a Sale
a Product
was Lost

* With apologies to the ageless "Jacula Prudentum" by George Herbert



CLAREMONT FLOCK

the magic cloak that gives paper the regal *look* and *feel* of velvet!

Box papers, luxuriously surfaced with richly-colorful Flock are carried as roll or cut stock by the *better-quality* paper merchants. Upon investigation, you'll find too that their *best-quality* velvetized offerings are processed with Claremont Flock! Claremont Flock is uniform; responds perfectly to adhesive preparation, and forms a deep-pile foundation that won't fuzz, separate, crack or rub-off!

Flocked papers are available in both box-wrap weight and in rigid box-board pointages. Flock, in bulk, is obtainable for special spray and spot design purposes. Check your supplier. Flock offers *golden* opportunities!

This twin-deck Case of Cards, with its colorful, rich Flocked-paper-cover, invites one's enjoyment of the contents; deals an unbeatable selling hand; plays for purchaser preference—and wins!

CLAREMONT
WASTE MANUFACTURING
COMPANY
CLAREMONT N. H.

Claremont Flocks (cotton, rayon, wool) are Champions in their Art Eighteen brilliant colors carried in stock. Matched hues to specification. Complete details, color cards, samples, prices and names of reliable sources of supply for Flock's many categories of application are yours upon request. Learn the *fascinating facts* of *Flock*. Inquiries invited. Write to Claremont today!

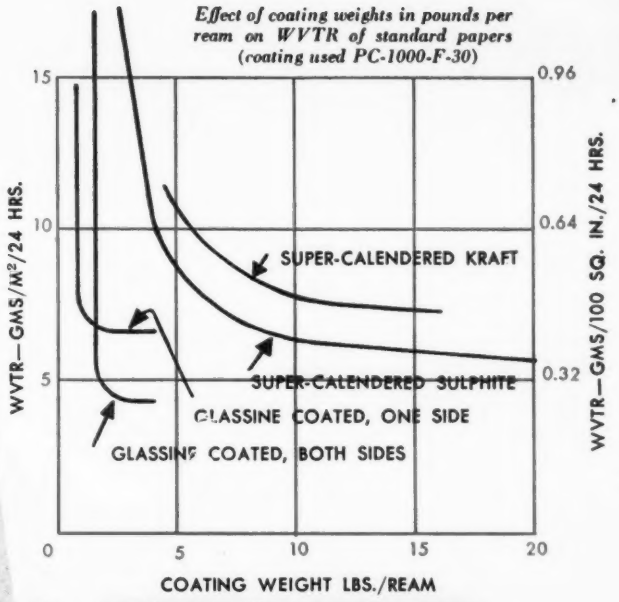
CLAREMONT FLOCK . . . the Plush that Sells!

Packaging Papers Have Lower WVTR*

When your coatings are made with

PLIOLITE S-7

Effect of coating weights in pounds per ream on WVTR of standard papers (coating used PC-1000-F-30)



Tests in standard conditioner prove the outstanding WVTR of **Pliolite** *coatings.*

WHEN you formulate paper coatings with **Pliolite S-7,** you can be sure of excellent resistance to water vapor transmission. The chart indicates the WVTR of various paper stocks when coated with a range of weights of this synthetic copolymer developed by Goodyear.

As can be seen, papers coated with **Pliolite S-7** are excellent barriers to water vapor—only very small amounts—as low as 0.2—0.3 gms water vapor/100 sq. in./24 hrs.—can permeate potato chip bags, bread wraps and other food wraps made of glassine protected with **Pliolite S-7.**

In addition to this resistance to water vapor, **Pliolite S-7** coatings have excellent anchorage to a wide variety of papers—give "tearing heat seals"—have good crease resistance—excellent gloss—good handling characteristics—and are practically unaffected by age.

Pliolite S-7 is available as a straight 30% solution in toluene **(Pliolite S-7-30)** or as an already-prepared paper coating, (PC-1000-F-30). For details and sample, write: Goodyear, Chemical Division, Akron 16, Ohio.

**WVTR—Water Vapor Transfer Rate.*

USE PROVED Products

GOODYEAR

Pliolite—T.M. The Goodyear Tire & Rubber Company

Look For...

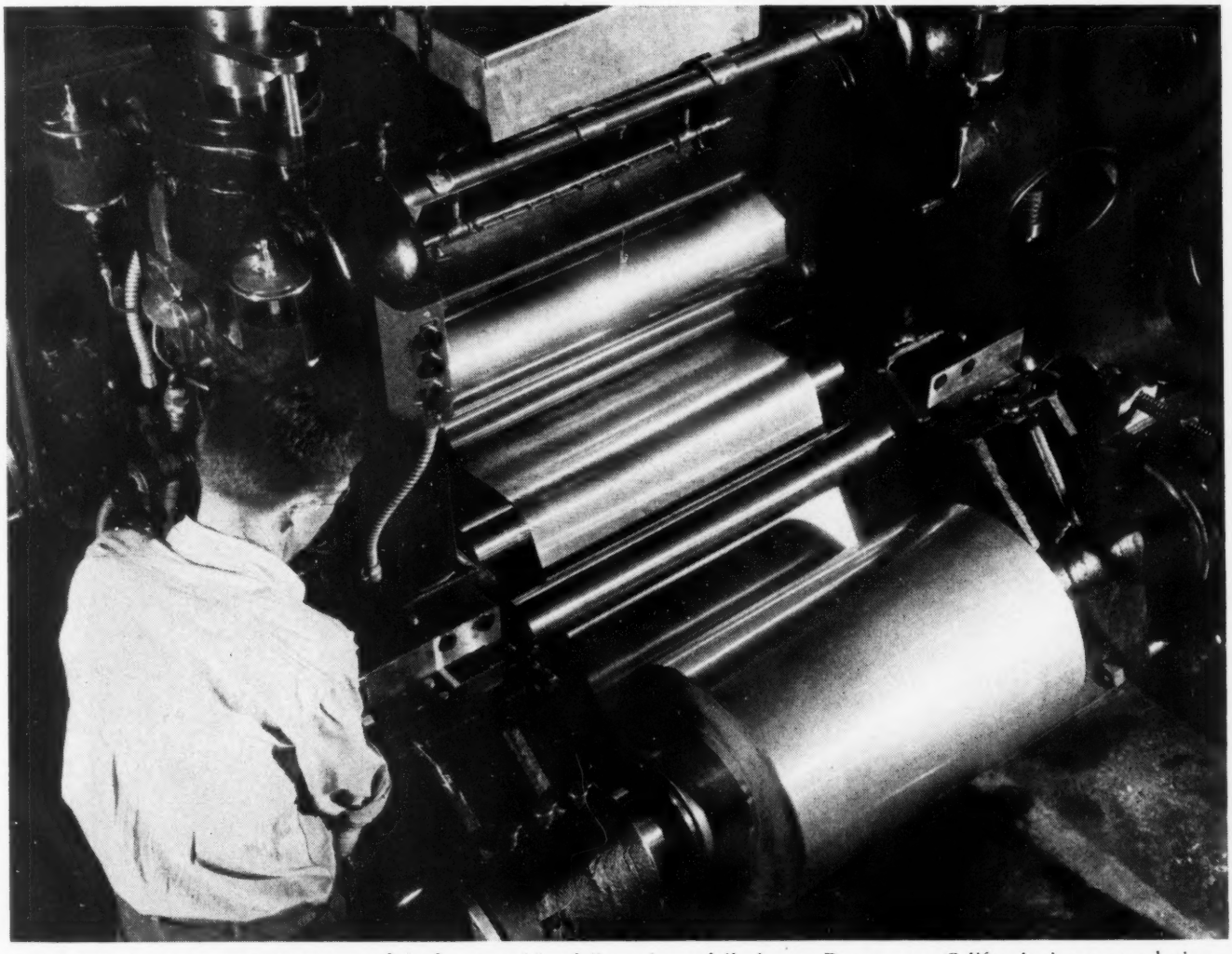
OLD DOMINION Box Company Inc.

"Engineered For Travel"

CHARLOTTE, N. CAROLINA

Eight plants Throughout The South Making Every Type of Paper and Fiberboard Package, Set-Up, Canister, Corrugated, Folding, Visi-Tainer Standard Line

Kaiser Aluminum Foil is now being delivered



EMPLOYING HIGHLY SKILLED PERSONNEL and the finest precision foil rolling mills, such as the one above, Permanente Metals' aluminum foil plant at Permanente, California, is now producing aluminum foil of unsurpassed quality and uniformity.

Already, Kaiser Aluminum Foil is being delivered . . . on schedule, as promised.

Through its nationwide sales organization, Permanente Products Company is confirming orders . . . in thicknesses of .006 to .00025, in rolls up to 30½ inches wide.

Because Permanente Metals' integrated operation controls every step of production—from the processing of bauxite through finished foil—you can be sure not only of consistent quality but also of reliable service.

It is on this basis of quality and dependability that Permanente Metals has become a major source of aluminum to thousands of leading manufacturers in other fields.

An inquiry at any of Permanente Metals' 22 sales offices will put us on the job for *you!*

Permanente Metals

PRODUCER OF

Kaiser Aluminum Foil

SOLD BY PERMANENTE PRODUCTS COMPANY, KAISER BUILDING, OAKLAND 12, CALIF. . . . WITH OFFICES IN:
Atlanta • Boston • Chicago • Cincinnati • Cleveland • Dallas • Denver • Detroit • Houston • Indianapolis • Kansas City • Los Angeles
Milwaukee • Minneapolis • New York • Oakland • Philadelphia • Portland, Ore. • Seattle • Spokane • St. Louis • Wichita

SERVICE ON SQUEEZABLE BOTTLES

Plax can now give immediate delivery from stock of Plaxpak (polyethylene) Boston Round bottles in 1, 2, 4, 6, 8, and 16-ounce sizes. These are in natural polyethylene, as shown above, for broadest possible use.

From application on through to merchandising, Plax can assist in the use of these and other Plaxpak bottles. Users can draw from an increasing accumulation of data on permeability of chemicals and cosmetics, on printing and labeling, and on atomizing heads and closures.

Sales departments may find special use for the "Data Sheet for Retailers on Plaxpak Bottles", a copy of which will be mailed on request.

PLAX
FOR PLASTIC SHEET, ROD & TUBES
NOT SUBSTITUTES ··· IMPROVEMENTS

PLAX CORPORATION DIVISION, HARTFORD-EMPIRE CO.
P. O. BOX 1019 ★ HARTFORD 1, CONNECTICUT
In Canada — Canadian Industries, Ltd., Montreal

Flexible canning or bottling describes FLEXKIN*—the strongest, most effective wrapping protection against the elements. Our production facilities are full-scale, enabling us to engineer this heat-sealing MVB to any specific industrial needs.

Help yourself to the benefits of our wide experience and technical know-how in laminating foils and films on scrim or paper. Your inquiry is invited, and consultations are without obligation.

Large quantities of FLEXKIN* are now being produced for the military services under specifications: JAN-P-131 and AN-B-20.

ACME BACKING CORP.
BROOKLYN 6, N. Y.

National Rep.: **PACKAGING INDUSTRIES LTD.**
30 Church St., Montclair, N. J.

Pacific Coast: **GEO. B. WOODCOCK CO.**
813 N. La Brea, Los Angeles 38, Cal.

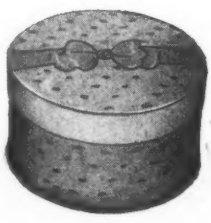
**Reg.*

Wistful Magic

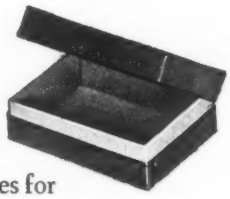
...and a touch of delicate splendor are imparted through the elegant craftsmanship behind Rowell containers.

This artistic achievement adds subtle persuasion to the purchase of cosmetics for face and dusting powders and helps send them on to their heavenly missions.

E. N. Rowell Co. Inc.
Manufacturers of Fine Paper Boxes
BATAVIA, N.Y.

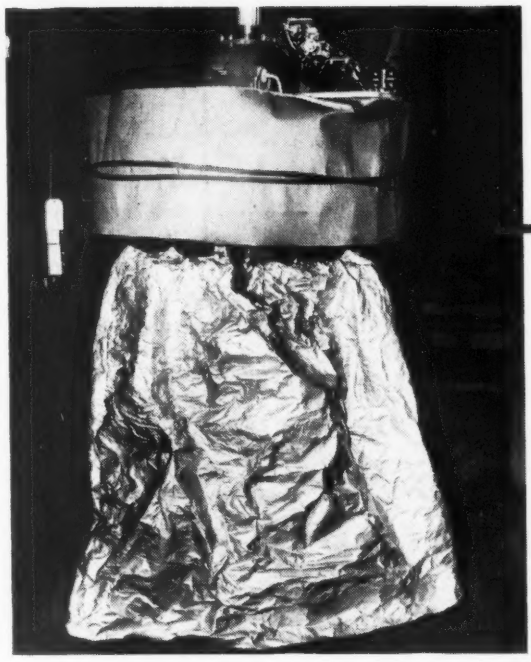


50 years of craftsmanship



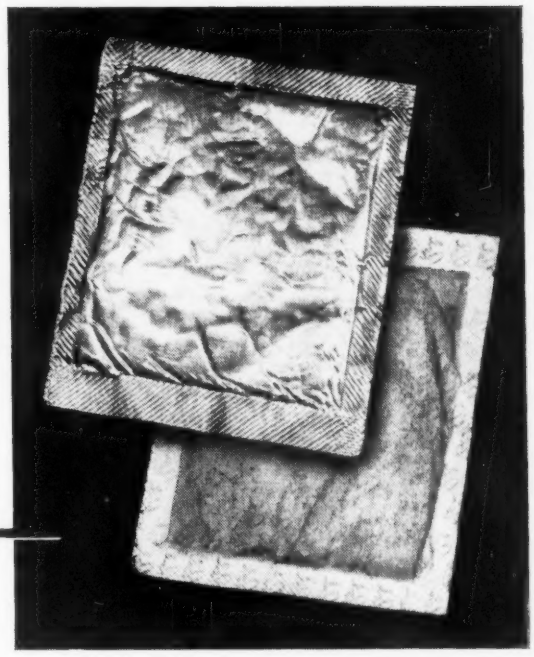
Boxes for pharmaceuticals

Magnificent color printing



FROM AIRPLANE ENGINES

TO HAIR WAVE CHEMICALS . . .



VINYLITE Plastic Foil Laminates Provide Packaging Perfection!

MIDGET PACKAGES for chemicals to speed milady's home permanent waves. Giant ones for airplane engines to keep them factory-clean. These are just two of many outstanding packaging jobs done by laminating VINYLITE Brand Plastic Film with aluminum foil . . . because they are sturdy, flexible, easily sealed, non-porous, and highly resistant to oil, grease, moisture, and most strong alkalies and acids.

Yet besides their application as laminates for foil, paper, cloth, VINYLITE Brand Plastics in their different forms have a multitude of other packaging uses where flexibility, transparency, color, formability, and chemical resistance are required—

There's tough, easily fabricated VINYLITE Cast Film that is so successful for packaging oleomargarine, as well as VINYLITE Brand Calendered Films . . . and coatings, moldings, and rigid sheets made of VINYLITE Plastics. Add to these BAKELITE Polyethylene Plastics. They're lighter than water, flexible, and chemical resistant, too, with extremely low water-vapor transmission.

Whether it's color, display, transparency, easy fabrication, or a broad range of other qualities you are looking for in packaging, you are cordially invited to bring your problems to Bakelite Corporation. Engineers first, salesmen afterwards, our representatives may well be able to show you how to speed production, increase merchandising advantages, and lower costs of your packages—with the proper use of the correct plastics. Write Department GH-55 today!

Foil Lamination Data Courtesy The Dobeckmun Company

Vinylite BRAND **PLASTICS**

TRADE MARK **BAKELITE CORPORATION**

BAKELITE CORPORATION, *Unit of Union Carbide and Carbon Corporation* UCC 30 East 42nd Street, New York 17, N. Y.

Can't Open It — I Won't Buy It Again
Mm Good . . . Tastes Good But Who's going to buy *that* jar?
If They Don't Stop This Evaporation I Won't Buy It Again.
Phew — It's Not Fresh! I Won't Buy It Again.
Moisture Got In. Hard As A Rock . . . Won't Buy It Again.
One Leaking Bottle Has Ruined Cases Full of Merchandise

JUST ANY CAP WON'T DO

Just any screw cap won't give your product any selling advantage whatever.

Screw caps that seal and sell must be engineered for *your* product as a *special* part of the package designing job by a manufacturer whose only interest is the *closure.*

That is why Ferdinand Gutmann & Co. developed, in addition to its standard line of screw caps, many types of specialty closures that *protect* your product best—please your customer most.

Most widely used among these specialties is Filma*-Seal, the economical inner seal which is applied with the Gutmann cap . . . stays on *after* the cap is removed.

Filma*-Seal gives your glass packed product extra sales appeal and extra protection against evaporation, moisture ingress, air ingress, tampering or sampling. We have already developed 28 variants of Filma*-Seal to solve specific problems for manufacturers who package in glass. We will develop the 29th variant for you . . . if you need it . . . and see it through your plant whether you package thousands or millions.

For closures that sell . . . **CALL A CLOSURE MANUFACTURER . . . *Call Gutmann***

Filma-Seal
CAP AND SEAL APPLIED AS ONE
*Reg. U.S. Pat. Off. and abroad

FERDINAND Gutmann & COMPANY
SINCE 1890

3601 14th AVENUE • BROOKLYN, N. Y.

"90% ALCOHOL" PROTECTED AGAINST EVAPORATION *with* Filma*-Seal CLOSURES

Whenever evaporation threatens the quality of your product it threatens, also, the reputation of your firm. To prevent evaporation, moisture or air ingress, use a *modern* packaging device—Filma seal.* Cap and seal are applied in one operation.

Filma-Seal
CAP AND SEAL APPLIED AS ONE

Planned Packaging Pulls Attention ...and ***Pushes Sales!***

Only a package geared to your product can most effectively create an impulse-to-buy.

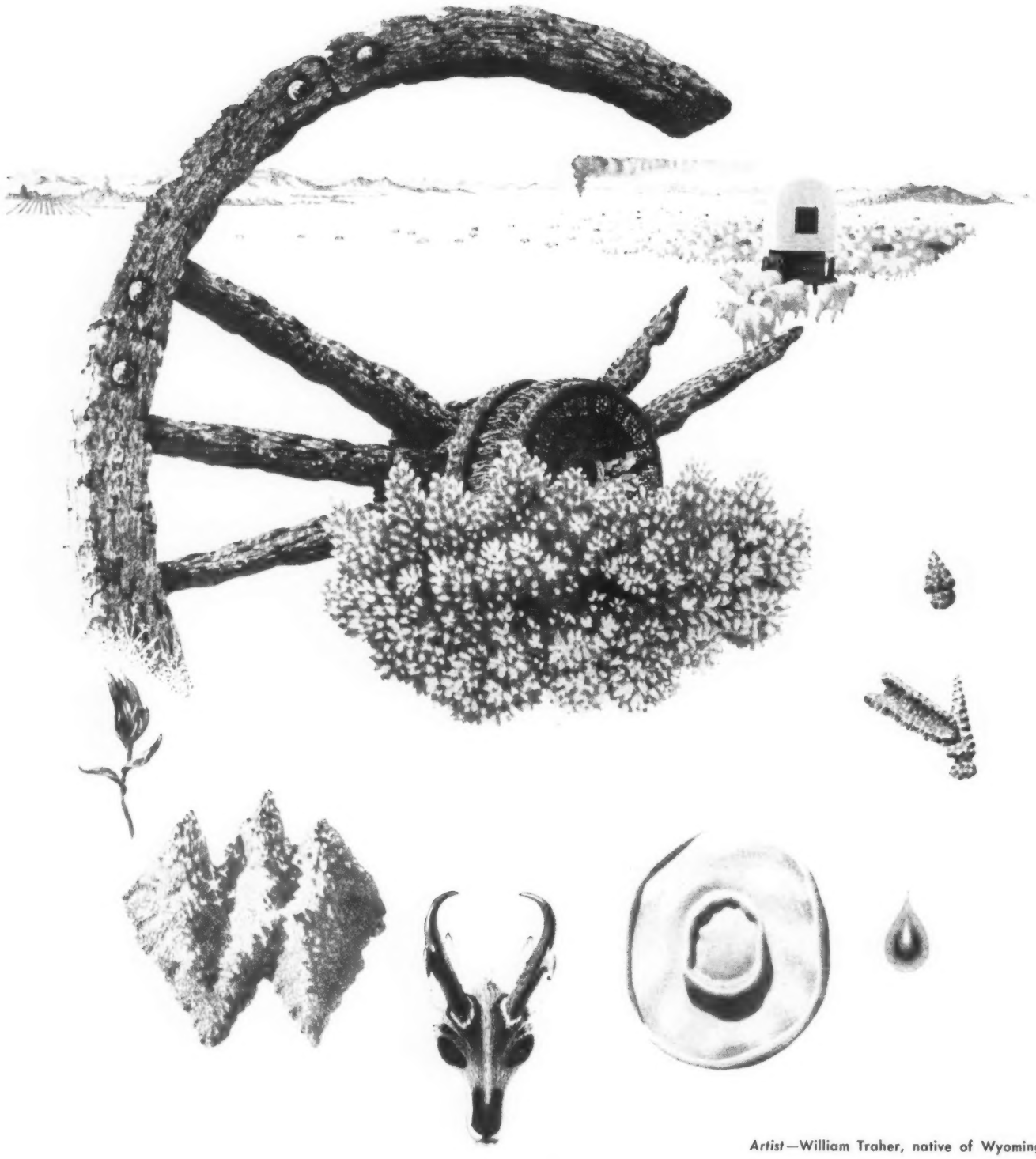
Since the turn of the century, America's most successful merchandising-minded makers of fine products—such as the phenomenally fast-growing Phyllis line—have chosen Farrington *Planned Packaging* to create the kind of interest that loosens purse strings.

A consultation will cost you nothing . . . and your Farrington package will cost you less than you'd guess.

PACKAGED by Farrington

FARRINGTON MANUFACTURING COMPANY

GENERAL OFFICES: 99 ATHERTON ST., BOSTON 30, MASS.
CANADIAN PLANT: FARRINGTON MFG. CO., LTD., 1191 BATHURST ST., TORONTO 4



Artist—William Traher, native of Wyoming

WYOMING—*annual purchases: $255 million—mostly packaged.*

CONTAINER CORPORATION OF AMERICA

POWDERS

TABLETS

FREE FLOWING SOLIDS

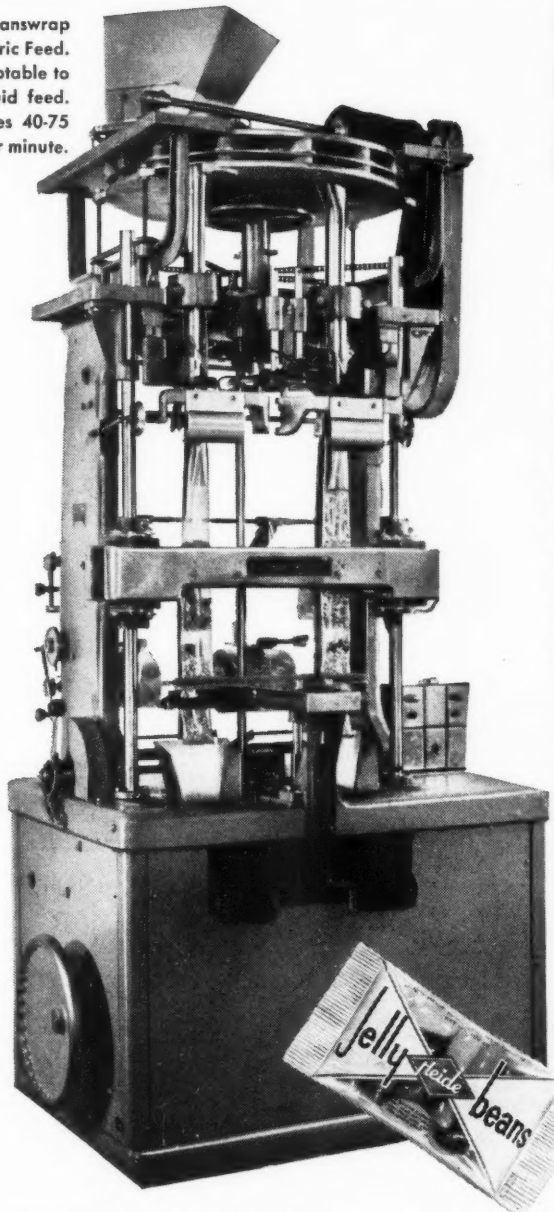
LIQUIDS OR SEMI-LIQUIDS

TRANSWRAP

AUTOMATICALLY

COMBINES MINIMUM PACKAGE COST WITH MAXIMUM VERSATILITY

Model "B" Transwrap with Volumetric Feed. Also adaptable to auger or liquid feed. Produces 40-75 pkgs. per minute.



In one machine, TRANSWRAP is a self-contained "packaging department." Using cellophane, Pliofilm, glassine, roll foil or other suitable heat-sealing materials, it forms, fills and seals your package completely automatically.

The same TRANSWRAP machine with suitable feed assembly can package 1 aspirin tablet or 1 lb. of peanuts . . . 1 teaspoon of vanilla extract or 1 lb. of margarine . . . 5 grams of salt or 16 oz. of powdered milk. Package sizes possible range from ⅞" x 2" to 5¼" x 13". They may be either pillow, or "fin seal" type (sealed around four edges).

From the standpoint of economy, TRANSWRAP adjustments and operation are so simple, a single operator can handle a whole battery of machines. Attractive, sales-conditioned TRANSWRAP packages, *filled and sealed*, actually *cost less* than ready-made *empty* bags.

Custom-engineered adaptations are possible on any TRANSWRAP machine to meet your individual requirements with maximum efficiency.

WRITE FOR FREE ILLUSTRATED BROCHURE

Manufactured and Sold by

TRANSPARENT WRAP MACHINE CORPORATION

Route 17 and Henry Street
Hasbrouck Heights, New Jersey

DUST-PROOF HELMET THAT TURNS WITH THE HEAD

...another example of what the American Anode process can do

THE hood pictured here makes work so much easier and safer for sandblasters. It's light in weight—has a shatter-proof, metal-protected glass window. It fits snugly and comfortably. Pressure supplies air to the wearer, keeps out dirt and dust.

This helmet is made possible by the American Anode process—a method whereby latices and mixes are deposited on a form, even a shape as intricate as this hood. Here's another important advantage. In ponderous, conventional type helmets, the operator's head turns inside the helmet—he must turn his entire body to bring work into his field of vision. It's fatiguing for the operator—inefficient for his work. This improved helmet is flexible—it turns *with* the operator's head.

American Anode mixes, and the Anode process, have scored many successes in the textile, paper, toy manufacturing, medical, and electro-plating fields. The mixes can be compounded in a rainbow of colors. They may be sprayed, spread, saturated, dipped or brushed. They can be compounded to meet a wide variety of service conditions.

We may have the answers you're looking for—to improve products or develop new ones. For complete information, please write Dept. AC-3, American Anode Inc., 60 Cherry St., Akron, Ohio.

AMERICAN ANODE

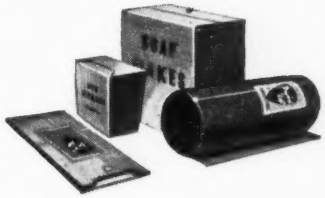
CRUDE AND AMERICAN RUBBER LATICES, WATER CEMENTS AND SUSPENSIONS, AMERAN RESIN PASTES

—or rejuvenating an old one? *Include*

Hundreds of manufacturers who are introducing new products, or rejuvenating old ones, have found it pays to call in a Gaylord sales representative right at the start.

From his wide experience and the facilities at his command, he'll be able to help your executives create a colorful, modern package that will sell your product.

And he can help you to build and hold customer good will through the use of shipping containers that assure delivery of your product in good condition.



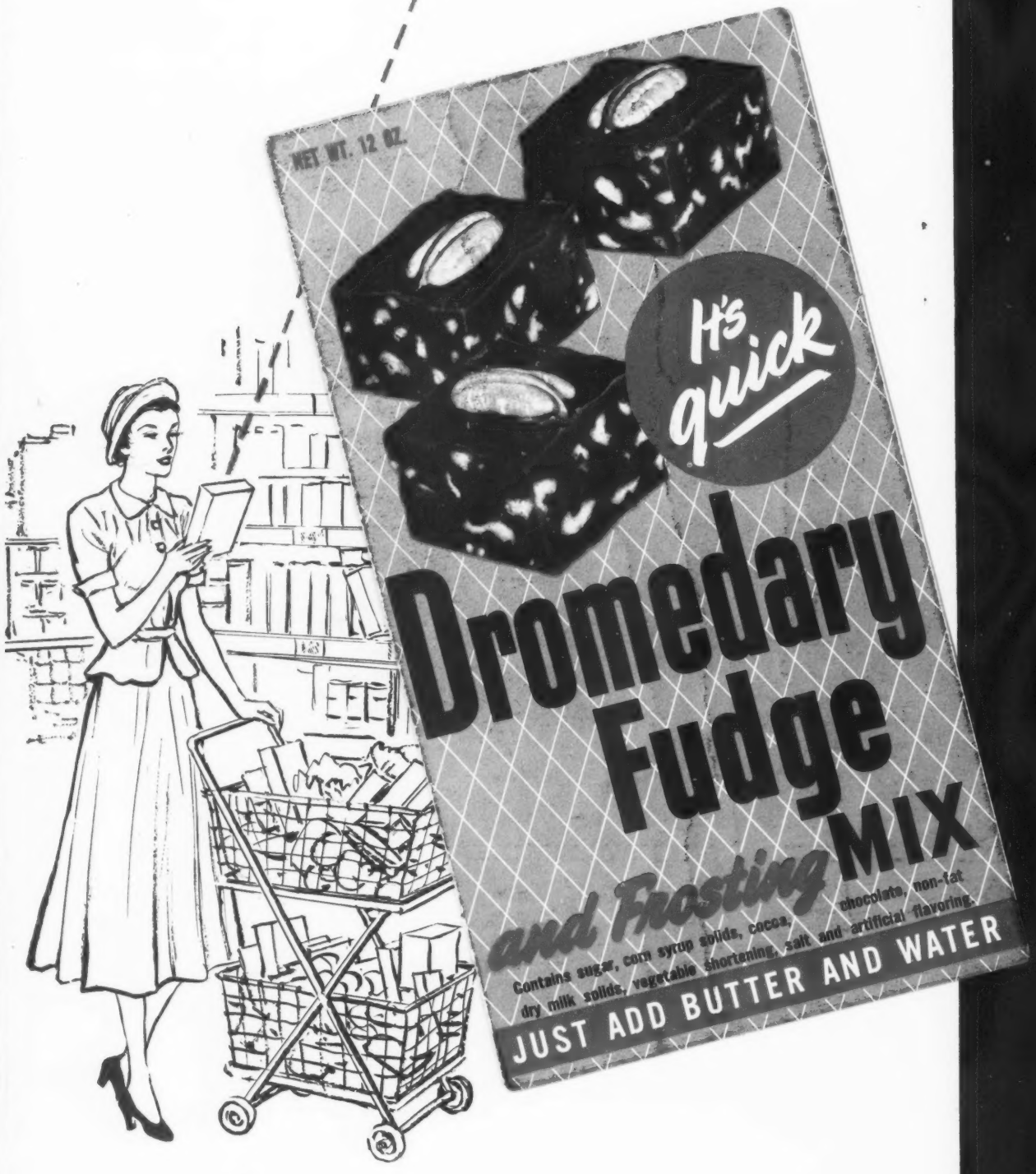
- Corrugated and Solid Fibre Boxes
- Folding Cartons
- Kraft Grocery Bags and Sacks
- Kraft Paper and Specialties

Call the sales office nearest you

GAYLORD CONTAINER CORPORATION, General Offices: ST. LOUIS

New York • Chicago • San Francisco • Atlanta • New Orleans • Jersey City
Seattle • Indianapolis • Houston • Los Angeles • Oakland • Minneapolis
Detroit • Jacksonville • Columbus • Fort Worth • Tampa • Cincinnati • Dallas
Des Moines • Oklahoma City • Greenville • Portland • St. Louis • San Antonio
Memphis • Kansas City • Bogalusa • Milwaukee • Chattanooga • Weslaco
New Haven • Appleton • Hickory • Greensboro • Sumter • Jackson • Miami

Makes Her Eyes Linger . . . .


NET WT. 12 OZ.
It's quick
Dromedary
Fudge
and Frosting MIX
Contains sugar, corn syrup solids, cocoa, chocolate, non-fat dry milk solids, vegetable shortening, salt and artificial flavoring.
JUST ADD BUTTER AND WATER

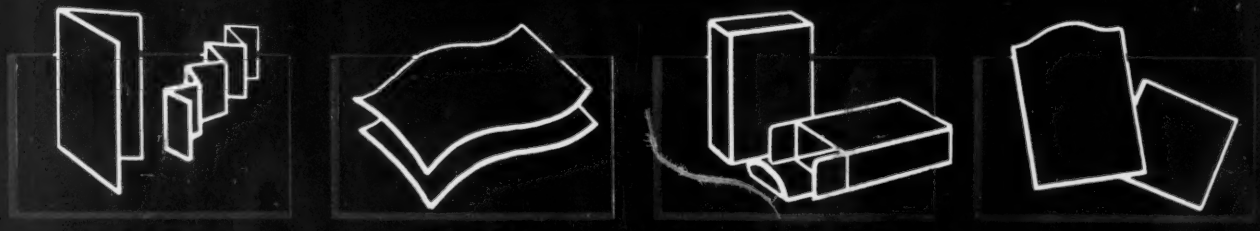
Fidel-i-tone is not just a name for a printing process. Fidel-i-tone is the result of nearly three-quarters of a century of research by The Lord Baltimore Press in the field of graphic arts. Fidel-i-tone is the exclusive property of Lord Baltimore. The mouth-watering illustration above is typical of what Fidel-i-tone means.

. . . . . Makes Her Mouth Water

*Fidel-i-tone

MAKES YOUR PACKAGE . . . SELLS YOUR PRODUCT

Fidel-i-tone brings your product to life, *makes it step right out of the package*. It catches pinpoint detail even in small color illustrations, and leaves no fuzz nor blur around the edges. Directions are easier to read because the type is clean, not filled in. Fidel-i-tone reproduces up to 200-line screen on ordinary folding boxboard. Fidel-i-tone is not an expensive process. It is craftsmanship applied to volume runs. Only The Lord Baltimore Press has Fidel-i-tone. Send us samples of your packaging, or tell us of your new plans and we will tell you what Fidel-i-tone can do for *you*.



INSERTS WRAPS FOLDING CARTONS LABELS

The versatility and adaptability of Fidel-i-tone on low cost stock is demonstrated in the wide range of inserts, wraps, labels, folders, and other promotional material which we are called upon to design and produce for leading national manufacturers. Fidel-i-tone can contribute to increased sales and economies in many ways.

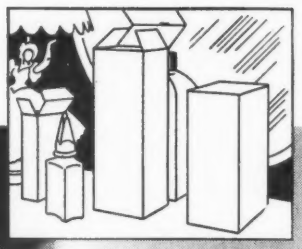
THE LORD BALTIMORE PRESS

BALTIMORE 2, MARYLAND

NEW YORK OFFICE: 595 MADISON AVENUE, NEW YORK 22, ELdorado 5-4180

CHICAGO OFFICE: 20 NORTH WACKER DRIVE, CHICAGO 6, ILL. FInancial 6-0368

In Cosmetic Products, For Instance



THE CLAY-COATED BOX BOARD THAT'S CUSTOM-MADE FOR EVERY ORDER

For Brightness and Beauty in Quality Packaging . . .

Smooth-Surfaced, Light-Resistant, Glossy Ridgelo

ACROSS THE COUNTER and in display, the cosmetic package creates the illusion of beauty implied in the use of the product. That's where Ridgelo comes in, for perfumes and powders, lipsticks and creams, gain their most effective eye-appeal with Ridgelo cartons.

Ridgelo has the solution to *your* packaging problems, too, for every order is made to measure! In color, size and finish, Ridgelo cartons are *distinctively* yours, custom-made to your specifications in every particular.

Perfect color matching, through Ridgelo's precision control system, guarantees you unequalled uniformity even in reorders of years' standing. Insoluble pigments range in color from muted to brilliant, to achieve the *exact* effect you desire . . . and Ridgelo's smoother surface gives the best printing results.

When the package is a prime ingredient for increased sales, rely on Ridgelo, America's fine box board, for the most profitable return on your packaging investment.

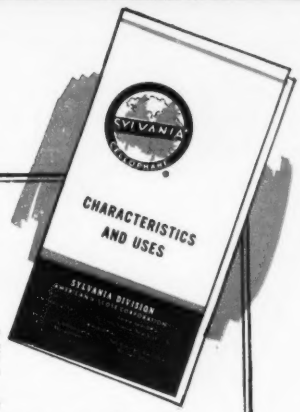
MADE AT RIDGEFIELD, N.J.
BY LOWE PAPER COMPANY

REPRESENTATIVES

H. B. Royce, Detroit • Philip Rudolph & Sons, Inc., Philadelphia
A. E. Kellogg, St. Louis • Norman A. Buist, Los Angeles

Now tools join the trend to visible packaging—and sure enough there is a member of the family of Sylvania Cellophane, type *MS* in heavier gauge, to help it put its best foot forward. Its inherent toughness lends itself to heavy duty packaging. It is impervious to the protective coating of machine oil on the metal. Its true transparency offers extra sales appeal.

Remember, every product demands its own combination of specific packaging properties. Whatever your present problem, you will find a Sylvania Cellophane tailor-made with its requirements in mind. Call on your Sylvania representative to help you determine just the right one. You will find him most cooperative.



KNOW YOUR CELLOPHANE

The booklet, "Characteristics and Uses of Sylvania Cellophane," is still available. Here are all the essential facts you need to determine the proper use of Sylvania Cellophane. Basic data on types, weights, protective qualities and recommended use is given in concise, easy-reference style. It's packed with the kind of information you need to meet today's packaging requirements. Write for your copy today. Address Market Development, Department MP-6.

SYLVANIA CELLOPHANE

SYLVANIA DIVISION AMERICAN VISCOSE CORPORATION

Manufacturers of cellophane and other cellulose products since 1929

General Sales Office: 350 Fifth Avenue, New York 1, N. Y. *Plant:* Fredericksburg, Va.

SYLVANIA CELLOPHANE

Check with Continental

- ✓ Check the dependability of supply that Continental assures users of cans.
- ✓ Check the quality of Continental's lithographed designs.
- ✓ Check Continental's service — service that has made customers of outstanding manufacturers in this field.
- ✓ Check Continental's record on research and product development.
- ✓ "Check with Continental" before making any decision affecting your supply of cans. It costs nothing, may mean much!

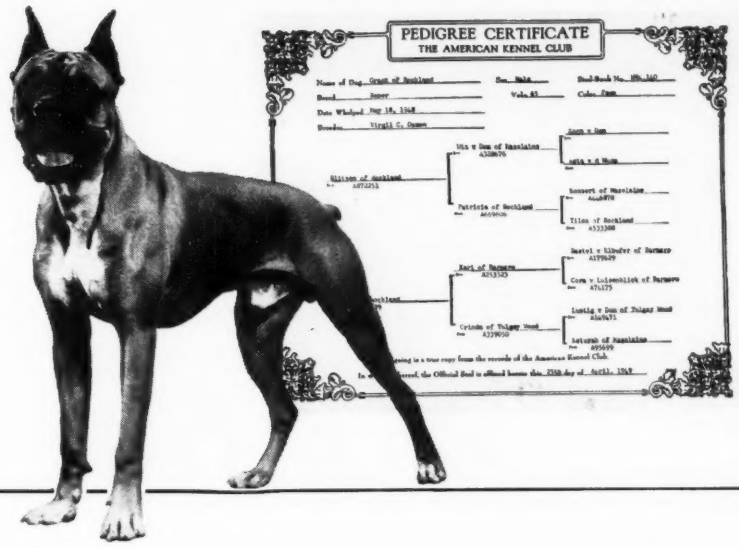
CHECK-LIST FOR DRUG, PROPRIETARY AND CHEMICAL MANUFACTURERS!

Continental makes a wide and complete assortment of cans for everything from pills to powders. If your packaging problem is one of size, shape, type of closure, special protection or merchandising appeal, chances are we have just the container you need.

You can't beat Continental as a dependable source of supply

CONTINENTAL CAN COMPANY

100 EAST 42nd STREET, NEW YORK 17, N. Y.



THE BOXER, America's No. 1 favorite for 1949, gets his name from the fact he uses his front paws in much the same way as a human boxer when fighting. Coloring of coat ranges from fawn to brindle, but his muzzle is always black.

Buyers Who Know

Look at the Pedigree

TRADE MARK UNION

Dependable Packaging Since 1872

THE UNION SHIELD is the pedigree mark of a box with 75 years of packaging leadership behind it.

That's why Standard Brands uses Union boxes to carry Royal Puddings —choice of millions—to dealers all over the country.

The Union shield means every step in the making, from tree to finished box, is tested and controlled by one management in America's largest integrated pulp-to-container plant.

Four modern box plants, five of the world's largest paper machines, and vast timber tracts are your guarantee of consistent quality, consistent service and fair price, today and in the future.

That's why every month more makers of famous brand products are shipping in Union boxes.

UNION Corrugated Containers

UNION BAG & Paper Corporation

Principal Offices: WOOLWORTH BLDG., NEW YORK 7, N. Y.

***Corrugated Container Plants:* SAVANNAH, GEORGIA • CHICAGO, ILLINOIS • TRENTON, NEW JERSEY**

Before you package it TALK TO RITCHIE
. . . 83 years of packaging KNOW HOW

LEADING PRODUCTS GO TO MARKET BY THE MILLIONS IN...

Packages by Ritchie

HERE'S WHY:

AMERICA'S LEADING MERCHANDISERS depend on Ritchie to make their packages—by the thousands or millions—*depend on Ritchie to deliver them on schedule!* Ritchie's been doing that for 83 years. Ritchie has the *know how* to help you on *any* package problem—design, construction, production-planning or—deliveries. Talk to a Ritchie man next time you consider a packaging source. Ritchie makes all types of set-up paper boxes, transparent packages and fibre cans. And—Ritchie men *know* packages.

Design:

If you seek a package that will better *identify* your product—an eye-catching, eye-appealing, *selling* package—one that will win jobber and dealer enthusiasm—Ritchie can supply you with that kind of package—in *any* quantity.

Construction:

Ritchie-made packages are *practical*—planned for production *at low unit cost.* Constructed to protect and/or conveniently dispense your product. Easy to fill or pack—to handle, stack and display. In short, a BETTER PACKAGE.

Production:

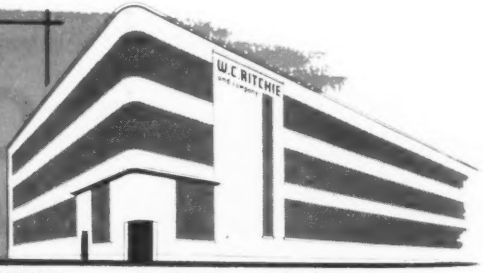
With specially designed, high speed labor-saving equipment—Ritchie functions as an arm of your own production line—delivers your package requirements ON SCHEDULE—even during your seasonal peaks. (*Ritchie's annual package capacity over a billion units.*)

• • •

Talk to a Ritchie Man—always at your service. Or send us your present package for suggestions. Let Ritchie help you develop a better package at low unit cost. No obligation.

SET-UP PAPER BOXES
TRANSPARENT PACKAGES
FIBRE CANS

W.C. Ritchie and COMPANY
8841 BALTIMORE AVE.
CHICAGO 17



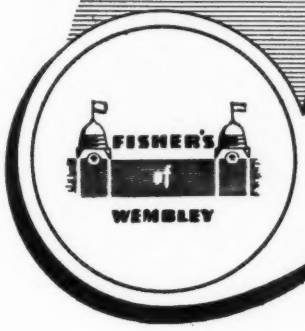
Packaging for the Leaders since 1866

NEW YORK • DETROIT • LOS ANGELES • ST. LOUIS • DENVER
PROVIDENCE • CLEVELAND • CHARLOTTE • JACKSONVILLE • DALLAS

Here is the FOIL to Climatic Changes!

ALL PRODUCTS ARE
BETTER PROTECTED INWARDLY,
MORE APPEALING OUTWARDLY,
WHEN DRESSED IN—

Fisher's Foils



FOR INNER PROTECTION

The skill and enterprise expended in the manufacture of a first-class product is effort wasted if the packaging is skimped. In transit, in general handling, in various temperature and climatic changes, your product must be adequately protected if it is to arrive in perfect consumer condition. Safety lies in Fisher's Foils which seal in freshness and guard against contamination, condensation and light transmission.

FOR OUTER ATTRACTION

And in addition Fisher's Foils will do as much again in enhancing the outward appearance of your packages by investing them with the colours and glitter of their many beautifully printed and embossed designs. These may be had wax or tissue lined for additional protection or laminated to board for general carton production. And being converters as well as actual manufacturers of Aluminium Strip, Sheet and Foil, Fisher's can make up, print and produce to your own standard designs. Let Fisher's Foils give your product that outward new look with that essential inner protection.

FISHER'S FOILS, LTD., WEMBLEY, MIDDLESEX, ENGLAND

Telephone: WEMbley 6011. *Telegrams: Liofnit, Wembley.*

FAMOUS PR
GAIR
NEW SIZE
POND'S
COLD
CREAM
ONE DOZEN
10¢
TUBES
POND'S
"ANGEL FACE"
LARGE SIZE
POND'S
DRY SKIN
CREAM
SMALL
JARS
POND'S
TISSUES
POND'S
EXTRACT COMPANY • 60 HUDSON STREET, NEW YORK 13, N. Y.
March 30, 1949
Robert Gair Company, Inc.
155 East 44th St.
New York, 17
Gentlemen:
The members of our organization are happy to extend hearty congratulations to you on the occasion of the 85th anniversary of the founding of your business. For many years you have supplied us with folding cartons, corrugated and solid fibre containers. During all that time your products have been highly satisfactory and our relationship with your Company a very happy one. We have particularly appreciated the benefit we have received from the cooperation of your technical as well as your sales staff.
We hope our pleasant relationship with your Company may continue for many more years.
Cordially yours,
POND'S EXTRACT COMPANY
Chairman of the Board
CMB:m
ROBERT GAIR COMPANY INC. • NEW YO
PAPERBOARD • FOLDING CARTONS

PRODUCTS GO TO MARKET

GAIR CARTONS

POND'S CREAMS, TISSUES, ANGEL FACE AND OTHER PRODUCTS HAVE BEEN GOING TO MARKET IN GAIR BOXES FOR YEARS

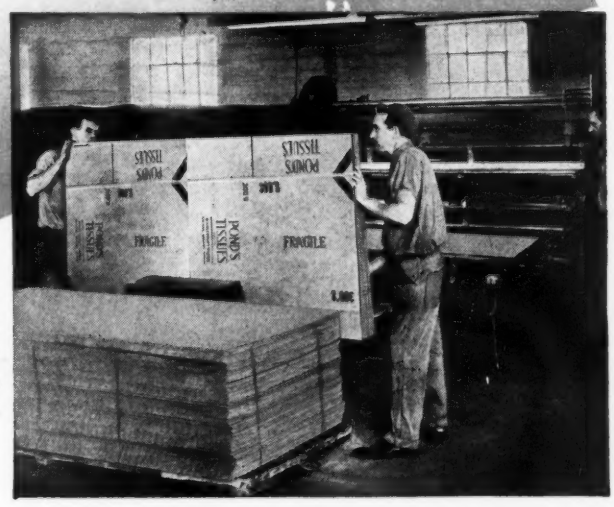
POND'S is an outstanding name in the Cosmetic and Toilet Goods Industry. Millions of dollars have been invested in advertising and merchandising to create nation-wide consumer demand for POND'S famous products.

ROBERT GAIR ORGANIZATION is proud of the fact that they created smartly designed folding cartons and shipping containers for POND'S and by so doing helped these famous POND'S products go to Market.

GAIR

NEW YORK TORONTO

SHIPPING CONTAINERS



POND'S SHIPPING CONTAINERS are produced in a strategically located Gair Plant.

CARR-LOWREY *Stock Bottles*

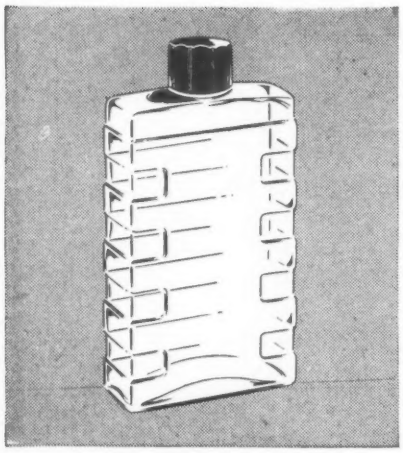
for perfume, toilet water and cosmetic products

Here are just a few of the styles which have always been popular. While these illustrations will be of value in helping you select the type of bottle to suit your product, we suggest you send for samples so that you can inspect the actual bottles at your leisure. If the style you want is not shown, our representative will be glad to make suggestions from our large assortment of stock designs.

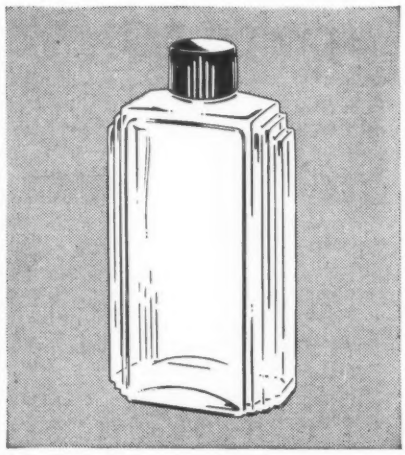
CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE 3, MD.

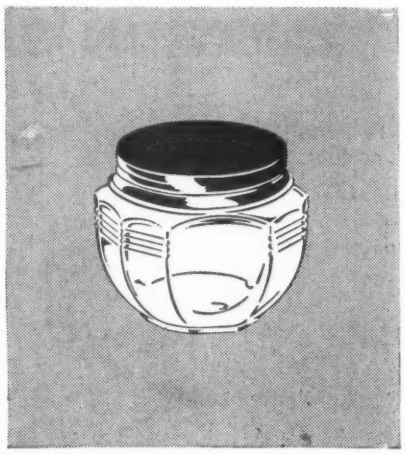
New York Office: 40 WEST FORTIETH ST. • Chicago Office: 1502 MERCHANDISE MART



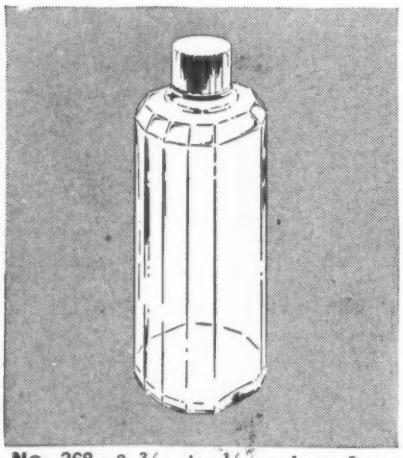
No. 372—½ oz., 1 oz., 2 oz. and 8 oz.



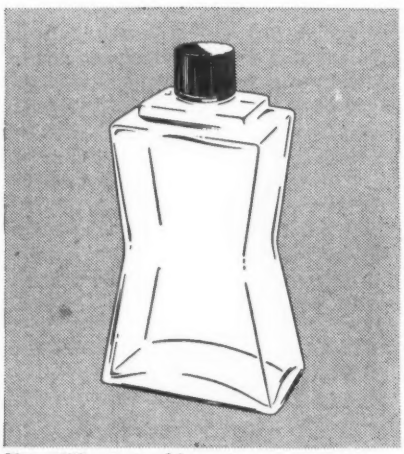
No. 369—½ oz., 1 oz., 2 oz., 3 oz., 4 oz., 6 oz. and 8 oz.



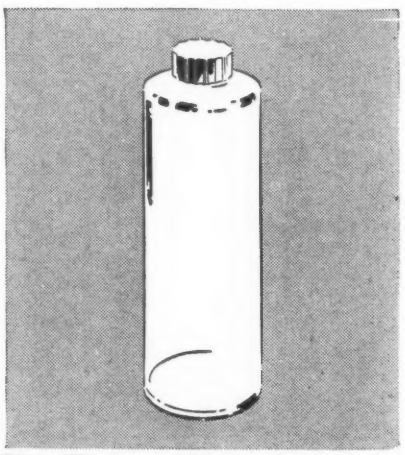
No. 387—Jar—1¾ oz. and 3 oz.



No. 368—3 3/16 dr., ½ oz., 1 oz., 2 oz., 3 oz., 4 oz., 6 oz., 8 oz. and 16 oz. Also made in Squat Style in 1 oz. and 2 oz.



No. 408—2 dr., ½ oz., 1 oz., 2 oz., 4 oz., 6 oz. and 8 oz. Also 6 oz. Wide Mouth.



No. 433—Tall Cylinder—4 oz., 8 oz. and 16 oz.

STAR BRAND ADHESIVES..

PASTES · GLUES · ADHESIVES GUMS
STAR BRAND

ONE TRIAL IS WORTH A THOUSAND WORDS!

That comfortable feeling of *knowing* your adhesives are on the job *after* production is yours the day you standardize with STAR BRAND ADHESIVES.

Ceaseless research, finest raw materials and careful compounding put into every Star Brand Adhesive the reliability that means *results* . . . flawless, dependable results for each of your packaging operations calling for an adhesive.

From labeling to case sealing... there's a Star Brand Adhesive formulated to deliver exactly the results you're looking for. For exceptional conditions requiring a *special* adhesive, try our RESINOUS and LATEX BASE emulsions . . . and our LACQUER TYPE adhesives.

- **STAR Case Sealing Glue**
- **STAR Folding Box Glue**
- **STAR Hot & Cold Pick-Up Gums**
- **STAR Tin Paste**
- **STAR Brightwood Gum**
- **STAR Carton Sealing Glue**
- **STAR Bench Paste**
- **STAR Tube Glue**
- **STAR Lap End Paste**
- **STAR Tightwrap Glue**

. . . and STAR Labeling Glues in Ice-proof and Semi-ice-proof formulations.

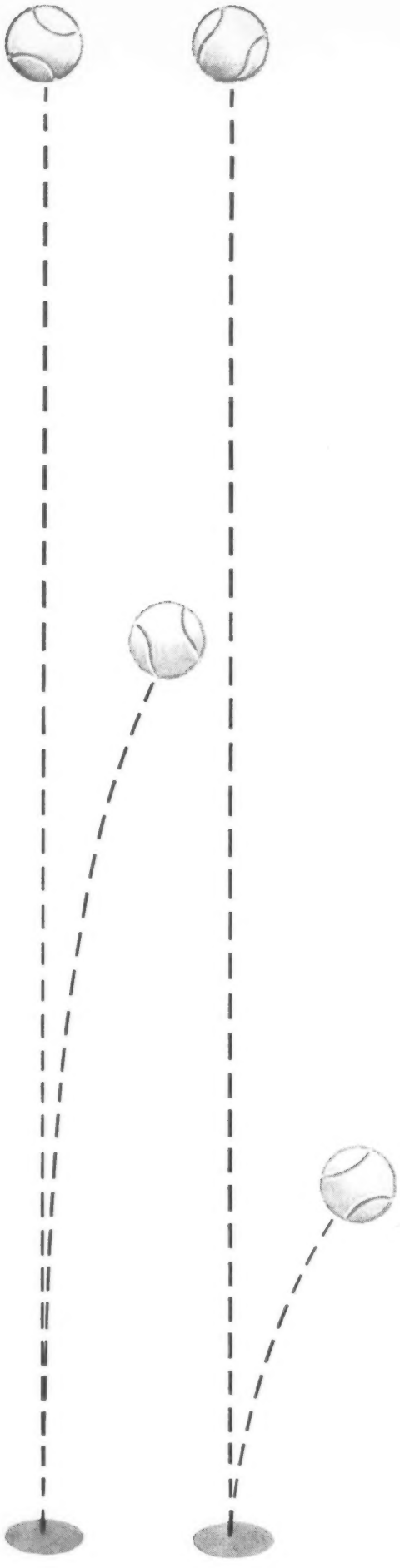
Bingham Adhesives

"MAKE YOUR IDENTITY STICK"

BROTHERS COMPANY

SINCE 1826

NEW YORK	BALTIMORE	PHILADELPHIA	ROCHESTER	NEWARK
406 Pearl St.	131 Colvin St.	1315 Race St.	980 Hudson Ave.	Lister Ave.



Getting "more bounce" into your business

Some 15 years ago a simple packaging trick put more bounce into tennis balls.

The trick—putting them in a key-opening can under pressure—pleased everybody.

Inventories could be built up in slack seasons without fear that the tennis balls would go stale.

Shelf and window displays could be made in sporting goods stores easily.

Players had tennis balls with more bounce . . . any time . . . any place.

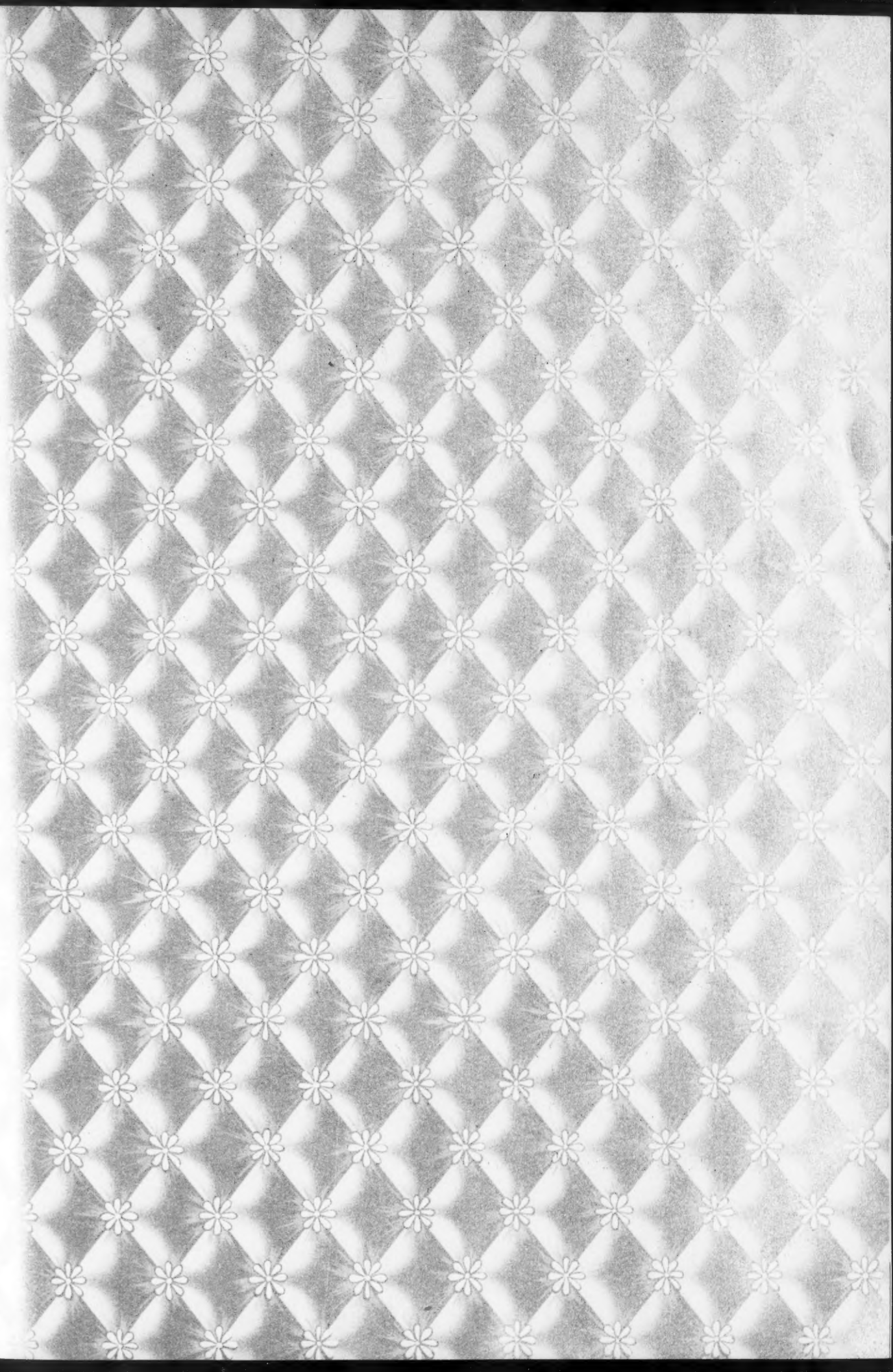
Perhaps similar expert packaging advice on the part of American Can Company will get "more bounce" into your product.

Canco know-how in devising new and better packaging methods has paid off in extra profits for others for 48 years. Maybe it can do the same for you.

AMERICAN CAN COMPANY

New York · Chicago · San Francisco

CALL CANCO FIRST



To assure

Distinctive packaging and increased sales

use

Perfection Decorative Papers

Box covering

Gift wrapping papers

Display papers

We have many attractive designs in rich color combinations appropriate for Christmas and general use.

Available in rolls and sheets • Write us for samples.

This sample is Pattern #0194-A
Metallique Platinum Base Stock.
Also made in other Color Combinations.

We specialize in creating and manufacturing exclusive trademark papers for Box Covering and Gift Wrappings. Your inquiries will be appreciated.

ROYAL PAPER CORPORATION

MANUFACTURERS OF DECORATIVE PAPERS

210-216 Eleventh Avenue • New York 1, N. Y.

the Jacoby Formula

Know How PLUS Imagination in Re-Use Remembrance Packaging That Sells and Resells.

"Quality - Like Character - Endures"

We are proud of the company we keep and what we have successfully accomplished for our ever growing clientele is yours to share.

If you too, are considering Repackaging for Mass or Class use, our Re-Use Remembrance Packaging has an impulse buying IMPACT all its very own. Jacoby designed and manufactured in our own plants to intelligently service and coordinate almost any packaging requirement—from the original design to the completed package.

•

Jacoby

Designed

Box Promotions

for

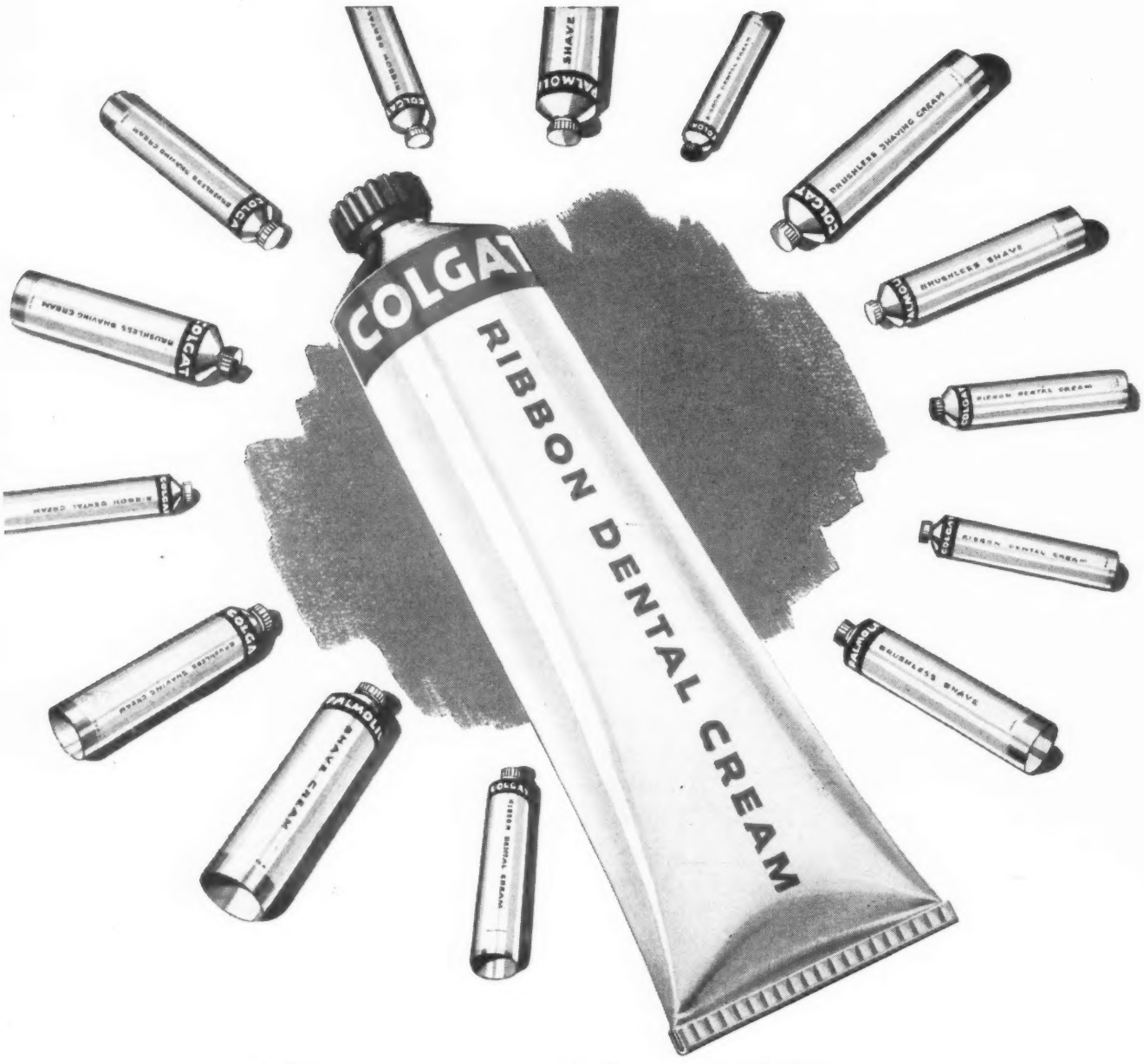
- Candy
- Cosmetics
- Liquers
- Shoes
- Gift Boxes
- Hats
- Gift Towel Sets
- Dolls and Toys
- Food Specialties
- Foundation Garments
- Jewelry and Novelties
- Neckwear
- Hosiery
- Gloves
- Gift Certificate
- Hair Goods
- Handkerchiefs

JACOBY-NARCE CORPORATION

"Sales promotional packaging since 1932"

72 SPRING STREET • NEW YORK 12, NEW YORK

BOSTON • DETROIT • CHICAGO • DALLAS • ST. LOUIS • CLEVELAND • LOS ANGELES



"Good taste" in packages

YOU ARE LOOKING at a "good taste" combination that has earned an enviable place in millions of homes. Colgate-Palmolive-Peet quality products are packaged in bright, clean-looking aluminum tubes. Many are supplied by Alcoa.

No wonder! Easy-to-use Alcoa Aluminum Tubes are strong, comparably priced . . . their light weight cuts shipping and handling costs. What's more, aluminum walls readily accept and hold decorative coatings that will not chip or crack. Flashing tube shoulders blend beautifully with modern color designs. For information on economical packaging in Alcoa Tubes, write ALUMINUM COMPANY OF AMERICA, 2129F Gulf Building, Pittsburgh 19, Penna.

ALCOA ALUMINUM TUBES

MOTHMASTER manufactured and distributed by Irwin-Willert Company, East St. Louis, Illinois.

It's murder on moths... but a breeze for Beetle* plastics

BEETLE plastic was selected for Mothmaster housings because it is resistant to para-dichlorobenzene . . . and because it is light, strong and durable and will not warp, crack or peel.

BEETLE plastic can be washed in soap and hot water. And its range of beautiful permanent colors can match practically any home color scheme.

Yes . . . BEETLE plastic is worth looking into for packaging or housing your own products, be they jewelry or cosmetics, drugs or gift specialties. It lends itself to better designs—gives a product sales-boosting eye appeal. And *very* important . . . fast-cure BEETLE molding compounds reduce cure-time, speed up production and cut costs.

Consult your plastics molder or us.

AMERICAN Cyanamid COMPANY
PLASTICS DEPARTMENT
34B ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

*Reg. U. S. Pat. Off.

CHRISTMAS!!

When the time comes, as it always does, we'll send you our warm wishes for a Merry Christmas and a Happy New Year. But we'd like to suggest, without waiting a moment longer, that your holiday season will be merrier, and happier, if you start planning your holiday packages now.

By doing so, you'll avoid the last-minute rush that jeopardizes shipments and turns many a businessman's hair gray. If you don't believe that Christmas rush can turn hair gray, just look at Santa Claus!

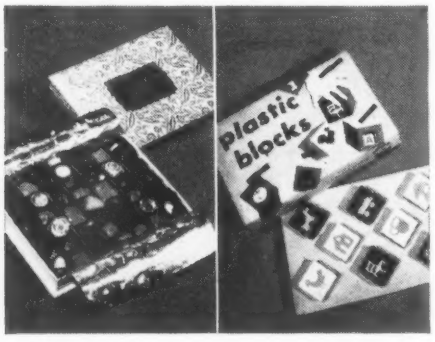
Christmas packages, you know, aren't necessarily red and green; nor must they display the stereotyped holly-and-bell designs. Christmas time is often an ideal season in which to introduce a new package; yet the package itself need not submit to seasonal limitations. A package can be designed to stimulate sales in June *as well as* in December. This makes it more generally useful . . . and more economical.

Examples of such packaging appear in the Miller-made boxes shown below. The candy box, a handsome two-pounder called the "Gold Leaf Package," makes repeated use of the gold motif: in the exterior design, in the inner protective wrap, and in the small wrappers around individual pieces of candy. This box is ideal for gift purchases at Christmas time, yet attracts favorable attention at any time of year.

. The toy box, too, shows how a package can combine holiday festivity with a display value that builds sales all year round.

It's true, of course, that some merchandise *demands* the holly-wreath touch. Yet here, too, ingenious package design can bring a real competitive advantage.

Winter, summer, spring, and fall . . . Miller packaging service is doing a creative job for manufacturers in many fields: pharmaceuticals, confectionery, toys, novelties, jewelry, hardware, paper products. Whether or not you've used set-up boxes before, you'll find the Miller representative a good man to know. Call him in!



For more
Sales Punch
consult a Boxing Champ

WALTER P.
MILLER
COMPANY, INC.
452 YORK AVENUE, PHILADELPHIA 23, PA.

Designers and manufacturers of SET-UP PAPER BOXES

Armstrong's Injection Molding for Special-Purpose Jobs

Armstrong's modern equipment is available for specialty injection molded pieces—special-purpose closures for the chemical, cosmetic, and liquor fields; shaker-type dispensing closures; bottle bases; and other custom molded jobs featuring the use of thermoplastic molding materials.

Armstrong's extensive experience in plastics molding is at your service for packaging and design problems. Our wide range of equipment capacity can accommodate both small and large pieces.

A wide selection of transparent and opaque colors from pastel to solid colors are available to fit any packaging requirement. Consult us for information or assistance in the development of plastic items related to packaging. For complete information, address Armstrong Cork Company, Glass and Closure Division, 5906 Prince Street, Lancaster, Penna.

ARMSTRONG'S
Artmold
PLASTIC
CAPS

WEST COAST REPRESENTATIVE: I. F. SCHNIER CO., INC., SAN FRANCISCO 7 AND LOS ANGELES 12

the facts of life about

POLYETHYLENE CLOSURES

Polyethylene caps and plugs are among the most interesting closures developed in years – attractive to the eye, highly resistant to moisture and chemicals –

but they mean trouble on your production line unless used on containers made to close tolerances.

Clearsite Containers are perfectly mated to polyethylene closures – none too tight, none too loose. They join in a water-tight seal – vigorous shaking won't budge it – yet the closure is easily slipped off with a flick of your thumb. It's a perfect fit every time with Clearsite.

Don't learn the facts of life about polyethylene closures the hard way – from the experience of others, we will show you the easy way to fast, trouble-free, economical production.

Other Advantages Of Clearsite Containers

Shatterproof • streamlined neck design for choke-free filling and dispensing • 1/5 weight of glass – less bulk, economical to ship and handle • imprinted with your label during manufacturing • seamless • crystal clear or gem-like colors • rigid or flexible • large variety of stock sizes available • can be made in all thermoplastics • can be furnished for molded or metal screw caps as well as other types of closures.

write for our pamphlet "28 Packaging Ideas For You"

the secret's in the Container – not in the closure

Celluplastic
CORPORATION

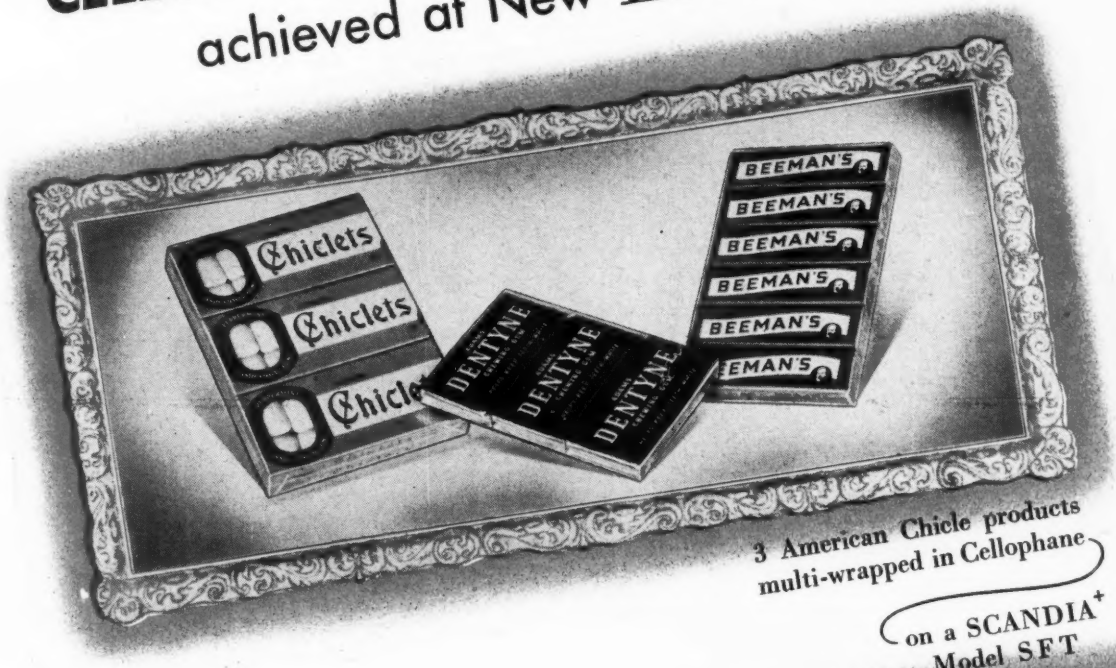
52 Avenue L, Newark 5, New Jersey

Offices in principal cities. See "Celluplastic Corp." in phone book.

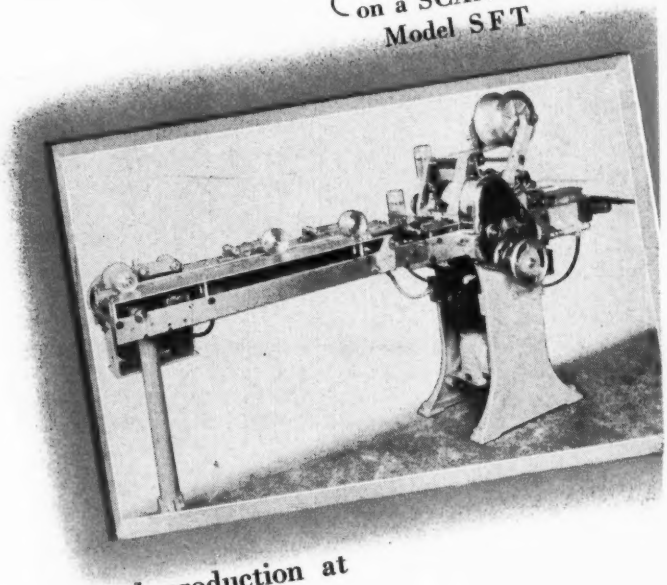
America's #1 source for plastic containers

*registered

Incomparable
CELLO-WRAPPING
achieved at New *Low Cost*



3 American Chicle products multi-wrapped in Cellophane on a SCANDIA+ Model SFT



The Facts —

100-A-MINUTE for multi-packs is standard performance on these popular packs. They are wrapped WITHOUT cardboard bases; require 30% LESS cellophane than other automatic machines because of Scandia's thrifty style of wrap and have many operating advantages — like the movable heat-sealers which automatically move away from the packages whenever the machines are stopped, thereby preventing scorching or "cooking" of the product.

No production executive, contemplating increased production at lower cost, can afford to plan until he has seen smooth-running, quiet, fast and thrifty Scandia's at work . . .

+made under Bronander patents.

★ Saving 30% cellophane —

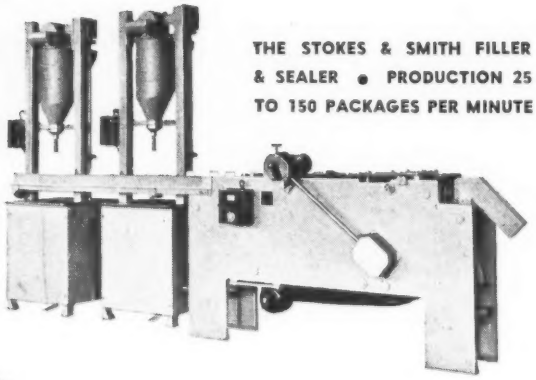
★ without using any cardboard

Scandia
MANUFACTURING COMPANY
NORTH ARLINGTON, NEW JERSEY

Hot Drinks for Cold Weather

Cold Drinks for Hot Weather

Packaged on the S&S Envelope Filler & Sealer



THE STOKES & SMITH FILLER & SEALER • PRODUCTION 25 TO 150 PACKAGES PER MINUTE

Packaged on the S & S Filler and Sealer, soft drink powder, chocolate powder, coffee, or any free-flowing material is accurately filled, tightly sealed and speedily delivered. One, two, or three filling machines can be used with each sealer . . . for production of from 25 to 150 packages per minute! Ask about it; write

STOKES & SMITH Co

PACKAGING MACHINERY — PAPER BOX MACHINERY

(A wholly owned)
Subsidiary of Food Machinery and Chemical Corporation

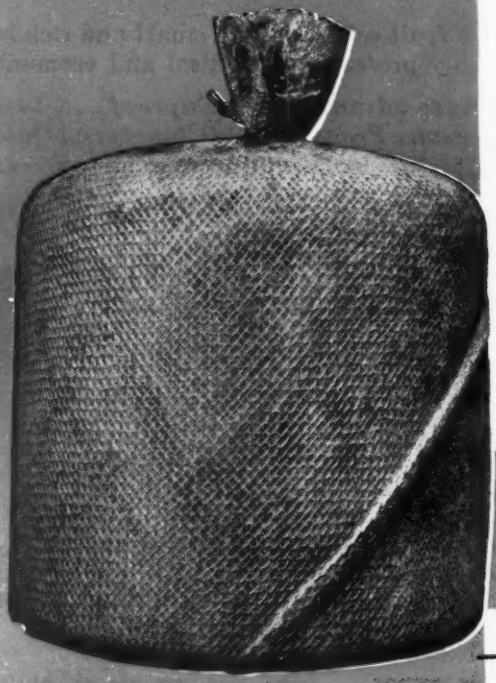
FRANKFORD, PHILADELPHIA, U. S. A.

SAVES UP TO 60%

by using Bemis TITE-FIT TUBING

This recent letter from a Tite-Fit Tubing customer shows what big savings are realized when this waste-eliminating method is used.

This versatile tubing fits almost any shape and a wide variety of package sizes. One roll may cover many different diameters and lengths without waste.



Thermoid Company
AUTOMOTIVE · INDUSTRIAL · OIL FIELD · TEXTILE PRODUCTS
TRENTON · NEW JERSEY · USA

Bemis Brothers Bag Company
Second Avenue and 51st Street
Brooklyn 32, New York

Gentlemen:

We have used Tite-Fit Tubing since its inception over 10 years ago. Accurate time study figures show our savings in labor costs on regular packaging operations to be as high as 33% to 60%.

In addition, Tite-Fit Tubing has also provided the superior covering that is required for our export packaging. We are particularly pleased by the favorable comment we receive from our customers on the neat, secure bales in which our merchandise is shipped.

Very truly yours,

Traffic Manager,
Thermoid Company

Perhaps you will find equally large savings with Tite-Fit Tubing. It's worth investigating. Get the facts. Mail the coupon now.

BEMIS BRO. BAG CO.
Brooklyn 32, New York

Also manufactured by Canadian Bag Co., Ltd., Montreal, and Ontario Bag Company, Port Colborne, Ontario.

MAIL COUPON NOW

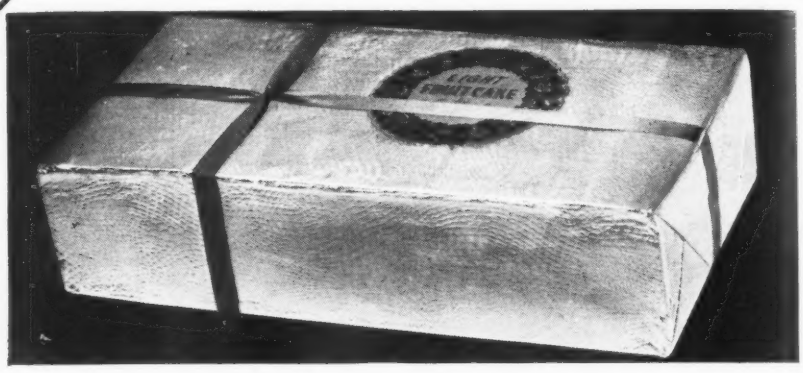
BEMIS BRO. BAG CO., 5130 Second Ave., Brooklyn, N.Y.

☐ Send descriptive folder on TITE-FIT TUBING
☐ Send sample. Our packages are approximately____ inches in circumference. (Please specify).

*Name*_____
*Firm*_____
*Street*_____
*City*_____ *Zone*____ *State*_____

STIMULATE SALES

with 2 brand new ideas



RIEGEL'S FRUIT CAKE WRAP

LAMINATED GLASSINE AND FOIL... PLAIN OR EMBOSSED

Here is a brand-new fruit cake wrap . . . smart and rich looking . . . and yet highly protective, practical and economical.

Check its many unique advantages: *Lightproof . . . Greaseproof . . . Highly Moisture Proof . . . Folds Snugly and Quickly Around Cake . . . Easy for Housewife to Rewrap as Used.*

Sheets or rolls in any sizes . . . plain or embossed . . . printed if desired.

INDIVIDUAL PACKETS OF READY-MIXED

CINNAMON AND SUGAR

Here's a new idea that has quickly proven its value through increased bakery sales. Each easy-to-open packet contains ¼ oz. of cane sugar and pure Saigon cinnamon... tightly sealed in a specially made, highly moisture-proof, coated glassine.

IDEAL FOR DOUGHNUTS . . . eliminates expense of sugaring.

ALSO USED WITH SPECIALTY BREADS . . . use one to three packets per loaf with recipes for french toast, cinnamon toast and bread puddings. Packets may be printed on both sides to suit your own requirements. Packed in special Riegel Papers by the Cumberland Packing Corp., 2 Cumberland St., B'klyn 1, N. Y.

SEND FOR COMPLETE INFORMATION AND SAMPLES

RIEGEL PAPER CORPORATION • 342 MADISON AVE. • NEW YORK 17, N. Y.

Bottle illustrated is a 16-ounce Boston Round No. A-8320 decorated with ACL

New glamour for an old friend...
Boston Rounds with APPLIED COLOR LABELS

● Boston Rounds in amber, emerald green or crystal-clear flint are examples of the economical packaging "miracles" possible with APPLIED COLOR LABELS.

Even a popular staple, such as furniture polish, gains sales glamour and style when decorated with APPLIED COLOR LABELS. Your label is fused into glass by us. Labeling operations in your plant are eliminated.

Dealers suddenly find they have space to give your product prominent display in such an attractive, new package. And you know display is half the battle for sales.

Economical Duraglas Boston Round bottles with APPLIED COLOR LABELS are suitable for a wide range of household and chemical products. They're sturdy, dependable production packages, too.

For details of the "Boston Round" story, call the O-I branch office near you.

Duraglas Bottles are Protectors of Quality

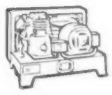
TRADE MARK REG. U.S. PAT. OFF.

OWENS-ILLINOIS GLASS COMPANY • TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES

Whether your packaging problem concerns cost reduction or improved product appearance, investigate what a high speed Lynch WRAP-O-MATIC can do for you.

To learn the complete money-saving story, send samples of your products and we will gladly advise the proper WRAP-O-MATIC Model, probable wrapping speeds, cost and delivery.

PAR AIR COMPRESSORS

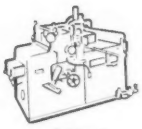


PAR REFRIGERATION COMPRESSORS

WRAP-O-MATIC CANDY & COOKIE WRAPPING MACHINES

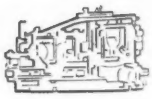
LYNCH CORPORATION

PACKAGE MACHINERY DIVISION
TOLEDO 1, OHIO U. S. A.



MORPAC PAPER PACKAGING MACHINES

MORPAC BUTTER & OLEO PACKAGING MACHINES



GLASS FORMING MACHINES

THERE'S a billion and a half dollar volume in the jewelry and silverware sales this year. Yes, watches, rings, gems, personal jewelry and tableware is big business. About 4 out of 5 jewelry and silverware units are packaged in set-up boxes or about 190 million set-ups.

Have you asked yourself, "What can I do to improve sales?". The answer may be in this gift business where packages are so important.

Investigate the new salesworthy set-up boxes.

Call your nearest manufacturer today.

NATIONAL PAPER BOX MANUFACTURERS
Association
AND COOPERATING SUPPLIERS
Liberty Trust Building • Philadelphia, Penn.

THE ipi PACKAGE POST

Highlights in inks for packages are shown by photos taken in the IPI booth at Atlantic City. Double usual space still prevents showing all of our friends who called on us.

International Printing Ink Division of Interchemical Corporation, 350 Fifth Avenue, New York 1, N. Y. Address inquiries Dept. A.

IPI, Anilox, Press-tested, In-Tag & Vaposet are trade-marks of Interchemical Corporation

Getting low-down on IPI Anilox is A. H. Murrell, Jr. of Package Products Co. (left) from Doug Tuttle, IPI. Mr. Murrell is admiring new Anilox inks for polyethylene. Laboratory samples were shown for first time. These inks will be offered shortly to commercial plants for test purposes.

C. H. Krout of Topflight Tape Co., York, Pa. (right) and Oscar Unglaub, IPI, examine new Anilox Inks for cellophane and cellulose acetate film—firm bonding, fast drying and light-fast.

Robert Neff, Pres. Gebhart Folding Box looks at handsome line of General Motors packages his firm printed. Fine construction, design and top-flight printing with IPI gloss inks produced these boxes.

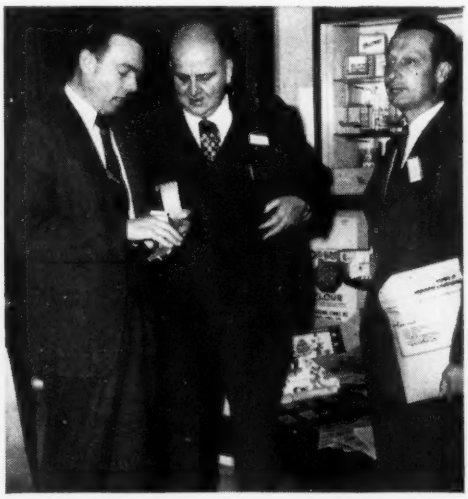
Fabulous Blue IPI ink on new Fab carton is admired by E. H. Balkema, Colgate-Palmolive-Peet package purchasing, and O. C. Holland, IPI. IPI inks used on Fab withstand the C-P-P "product-rub" test.

John Power, Jr., IPI Cambridge branch, and John Thompson, G. E., were kept busy explaining G. E. Recording Spectrophotometer in IPI booth. Permanent color records are keystone of IPI's Color Control Service for uniform production.

Color fingerprinted by G. E. Recording Spectrophotometer for National Sugar Refining Corp., Savannah, Ga. group. Curves of printed samples for Color Control fascinated visitors to IPI Booth. First G. E. machine was made for IPI.

I Booth at Packaging Show in Atlantic City showed all that's new in package inting inks and printing techniques—over 2,000 different packages printed all types of surfaces by every major process. Included were four groups of national prize-winning packages produced with IPI inks. Color control in production was also a feature of the IPI booth. Color experts made permanent color records for visitors before their eyes on G. E. Recording Spectrophotometer.

PI's Oscar Unglaub shows N. J. Miner (center) and W. E. Hawkin (right) of Standard Printing Company, how laboratory prints of new Anilox inks or polyethylene stand rough handling.



New IPI Color Guide for Boxboard is shown to J. M. Kinney (center) and C. A. Lear (right) of Chicopee Manufacturing Corporation. Package printers at show hailed this IPI boon to packaging men.

American Coating Mills' prize-winning packages with IPI letterpress and "Press-tested" offset inks get once over from New York A.C.M. sales manager, W. E. Terry, (right) and Ken Heiberg, Brooklyn Press.

ew IPI Vaposet Inks on multi-wall bags shown by John Osias, Richmond, Va. branch. Inks have more rub-resistance, same sharp printing and brilliant olor. Moisture in stock sets inks instantly—permits immediate fabrication.

Latest bag printing techniques discussed by E. E. West and E. E. West, Jr. of Chase Bag Company with IPI's Doug Tuttle. IPI specializes in inks for bags for wide range of materials—paper and cloth, laminated plastics and foils.

BRILLIANT MERCHANDISING

packaging by *Sanitape-Sealtite

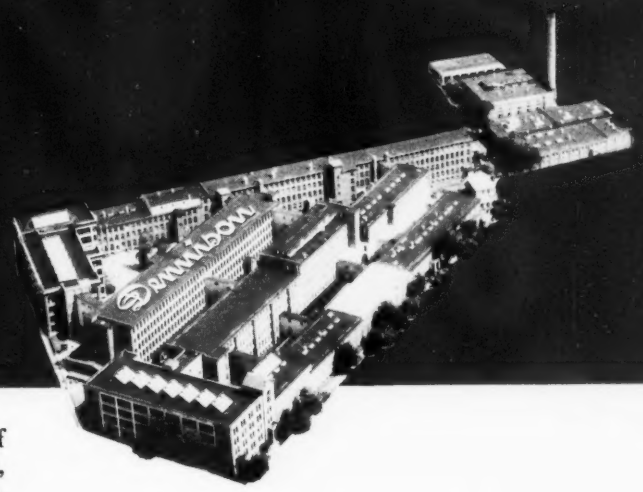
You Too can develop from one of these 4 basic types, a brilliant merchandiser for your product—a package of unique beauty, utility and convenience which wins consumer approval in tough, competitive markets. As sample or standard-sale unit, Sanitape-Sealtite offers proven and outstanding advantages. We shall be glad to give you details pertinent to your particular situation.

IVERS-LEE COMPANY

215 CENTRAL AVENUE • NEWARK, N. J.

*Sanitape-Sealtite is a unique method of packaging pills, tablets, capsules, creams and powders, by which each unit or unit dose is sealed in its own air-tight compartment—assuring convenience, protection and maintained efficacy. Packages, methods and machinery fully covered by United States and Foreign Patents, and Patents Pending.

Designed



DENNISON DESIGNED is the keystone of packaging prestige . . . a combination of expert designing, constructive imagination, accurate selection of materials, careful production. Dennison experience and versatility offer you the finest in packaging accessories — tags, seals, wraps, bands, labels, merchandise cards, set-up boxes.

Call the nearest Dennison Office or write Dennison, Distribution Division, Framingham, Mass.

Set-up Boxes

Dennison Designed

Dennison set-up boxes are designed and manufactured to give you the most effective package for your special requirements.

That's the way Dennison meets the exacting specifications of a Swank package.

Swank and Dennison work together to achieve —

- Original designing for fine appearance, display value, selling appeal.
- Practical construction to provide merchandise protection.
- Expert selection of cover papers.
- Manufacturing quality maintained by operative teamwork and high grade supervision throughout production.
- Economy brought about by applying the most efficient methods in keeping with construction and quantity requirements.

Dennison offers you convenience, time saving and assurance in a single cost transaction . . . . . designing, materials, and production, all in one price . . . . reflecting Dennison EXTRA VALUE.

Call nearest Dennison office or write Dennison Box Division, Marlboro, Mass.

LOOK TO Dennison FOR EXTRA VALUE IN

MATERIALS—DESIGN—WORKMANSHIP

packaged for *eye-appeal* with Koppers Polystyrene

ONE poker chip has just about as much sales appeal as another. The problem facing the poker chip manufacturer is to design a container that will catch the customer's eye and offer greater value for the money.

The Skyline Industries of Titusville, Pa. solved this problem with a colorful container of Koppers Polystyrene with brilliant poker chips molded from the same material.

The inside case is of rich transparent red. The cover is crystal which shows off the red, white and blue chips to advantage. Even the little heart-shaped handle is made of Koppers Polystyrene.

Sales of this poker chip case show it has lots of eye-appeal—and the low cost of Koppers Polystyrene gives the case a definite price advantage.

Bring your packaging problem to Koppers

Whether you make sporting goods, food products, cosmetics, jewelry—Koppers Polystyrene offers a combination of qualities that are well worth investigating. It is tasteless, odorless and extremely low in water absorption . . . will hold food products, alkalis and most acids . . . can be supplied crystal clear or in any desired color.

Possibly Koppers can help you with your packaging problems. Our technical staff is ready at all times to help you improve your designs and to choose the right packaging materials for your applications.

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Regional offices in New York, Chicago and San Francisco

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Please send me your new booklet on Koppers Plastics.

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Company_____

Address_____

City_____

Koppers *Perfected* Plastics

*POLYSTYRENE *ETHYL CELLULOSE *CELLULOSE ACETATE

NOW--GREATER STRENGTH AND BEAUTY FOR PLASTAFOL* CARTONS WITH HEAT-SEALING!

We've done it again—to keep you ahead in plastic packaging!

Our famous PLASTAFOL* Cartons—the only clear plastic cartons that *fold flat* for storage and shipment—are now heat-sealed by our exclusive CRYSTOSEEL* process.

To you, this means cartons of superior strength and beauty . . . cartons sealed at the seam into one *solid* piece of clear, top-quality plastic. It's good-bye glue—and in its place a seam you can scarcely see. Crystoseel* is the scientifically controlled way to seal cartons. And it costs you no more.

Look at all the other advantages of PLASTAFOL* Cartons. Check into how they can cut the costs and improve the appearance of your packaging. Write or phone for full information, prices and ideas today!

TROTH·BRIGHT·PAGE
INCORPORATED

Paoli, Pennsylvania. **Phone PAoli 1846**

*Trademark

FACTS ABOUT PLASTAFOL CARTONS

1. Cost less in small sizes than any other rigid plastic carton.

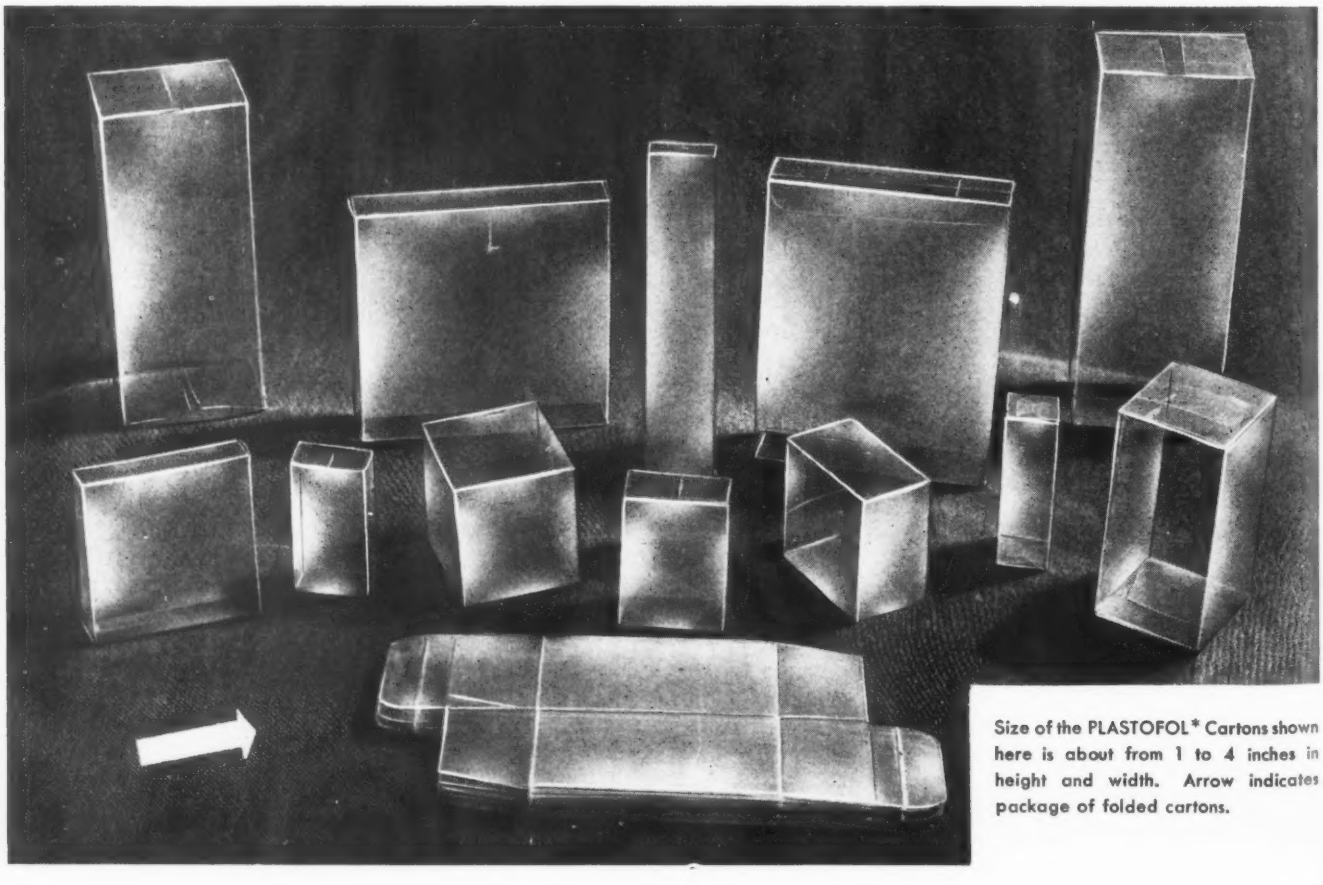
2. Save shipping and storage costs because they *fold flat* (50 or so to the vertical inch!) Fast, easy to set up.

3. Made of beautiful, window-clear plastic of proved durability and strength.

4. Available in a variety of designs and in large runs. Widely used for many types of products, particularly cosmetics.

5. Heat-sealed by CRYSTOSEEL* for strength and beauty.

LOOK AT THE VARIETY OF DESIGNS



Size of the PLASTOFOL* Cartons shown here is about from 1 to 4 inches in height and width. Arrow indicates package of folded cartons.

WIRZ Tubes help you meet demands of modern merchandising —protection—convenience—sales appeal

A case in point is the PRELL Shampoo . . . a completely adequate sales package that is making an irresistible appeal to women (and men!) all over America. This Prell Tube performs the three important functions of every good container – it protects – it adds convenience – it increases sales appeal of the product. Wirz is proud to have cooperated with P & G's engineers in developing the design as well as in the production of Prell Tubes. Our staff will welcome an opportunity to work with you on your packaging projects. Wire or phone us

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The natural brilliance reflected by the smooth mirror-like finish of COFCO Aluminum Foil is irresistible to the eye . . . compelling in beauty. Aluminum Foil offers these sales stimulating characteristics . . . plus protective qualities that will preserve your product under adverse conditions.

Aluminum Foil can be the means of increasing your sales through more attractive, better protected packaging. Write us for the names of converters and packaging manufacturers who have had a wide experience in Foils' adaptations. We will advise you promptly without obligation.

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Milwaukee 3, Wis.

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COCHRAN FOIL COMPANY

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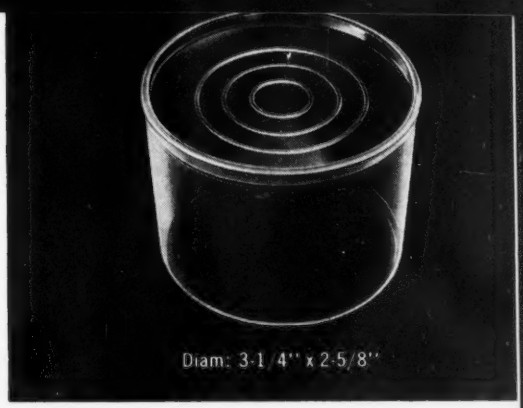
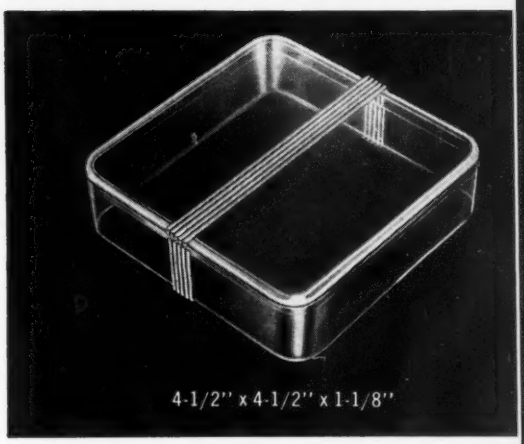
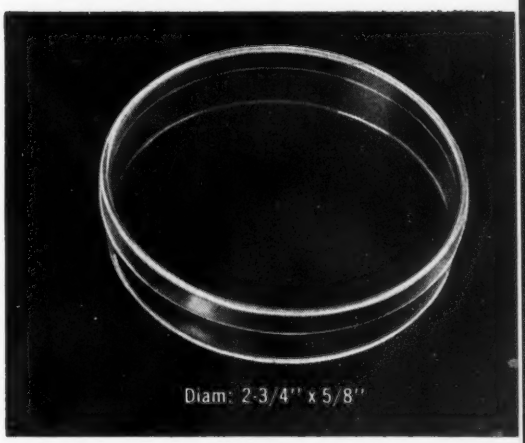
Make
Tri-State

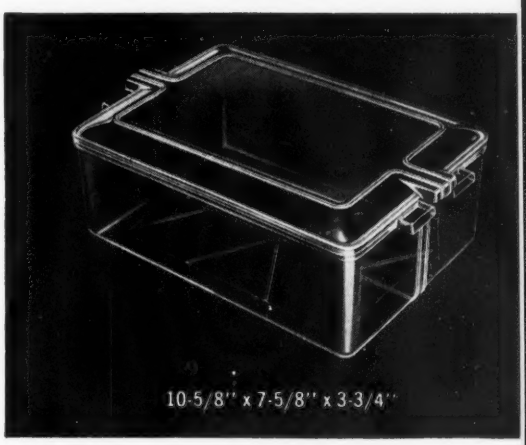
RIGID PLASTIC BOXES

Buyers'
Bonuses


Diam: 3-1/4" x 2-5/8"


4-1/2" x 4-1/2" x 1-1/8"


Diam: 2-3/4" x 5/8"


10-5/8" x 7-5/8" x 3-3/4"

PACKAGE IN PLASTIC—IN RIGID PLASTIC—FOR ADDED PROTECTION—GREATER POINT-OF-SALE APPEAL—BONUS UTILITY BOXES YOUR CUSTOMERS CAN USE

Feature your product in one of these gleaming, crystal-clear plastic containers. Each box is a showcase in itself, which keeps its contents completely protected from dust, dirt, contamination, and all harmful agents normally encountered.

Beautiful, transparent Tri-State Rigid Plastic Boxes ***stay*** with your customers. They'll find a hundred uses for these rugged, non-warping, washable containers—and come back again and again for the item in the ***bonus*** utility box.

There's a Tri-State Rigid Plastic Box to fit your product, build your sales, cut down on your packaging operations. If we cannot satisfy your needs from our wide range of stock sizes and shapes, we'll mold to your specifications.

NOTICE: We are the sole inventors and originators. Patents have been applied for on all these designs, and infringers will be prosecuted.

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FOR BETTER PACKAGING

Patapar Vegetable Parchment gives you better packaging in many ways. It has high wet-strength. It resists grease. Its protective qualities help keep foods fresh—appetizing.

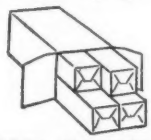
For sales appeal, Patapar's rich, white texture lends beauty and smartness. We give you color, too, by printing Patapar with bright, colorfast inks. Our plants are specially equipped for printing Patapar economically by letterpress or offset lithography.

May we design and submit a Patapar wrapper for your product?

Patapar REG. U.S. PAT. OFF.

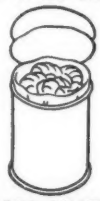
HI-WET-STRENGTH, GREASE-RESISTING PARCHMENT

These are some of Patapar's everyday jobs

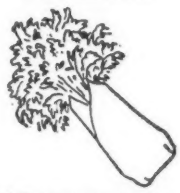


BUTTER WRAPPERS

PIE MIX BAGS



CAN LINERS



VEGETABLE WRAPS

• • •

Ham boiler liners
Milk can gaskets
Fish wrappers
Oleomargarine wrappers
Cheese wrappers
Bacon wrappers
and many other uses

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The right ink smooths the way to successful packaging

It is quite likely that your package will travel a very rough handling road from the time it is printed until it reaches milady's market basket. Thus it is essential that careful attention be given to these fundamental features so important in the successful production of printed packaging material: design, stock, color and INK. The use of the right ink and suitable color can help your package to:
stand out and attract the buyer's eye;
stand up under the wear and tear of modern distribution methods.

Investigate the properties and possibilities of the many types of ink available for package printing. You will find that General Printing Ink has a right ink for each particular job.

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- evaluates materials in terms of end use
- analyzes successful applications

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- charts physical and chemical properties
- lists plastics identification methods

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- describes all plastics machinery
- shows how to set up for production
- evaluates production methods
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- shows where to use plastics
- tells what competition is doing
- reveals how plastics improve more than 1000 different products

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- provides complete design information
- describes design limitations
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- contains exclusive up-to-date Buyers' Guide covering all phases of plastics procurement: materials, machinery, supplies, equipment, fabricating, molding, and finishing services.

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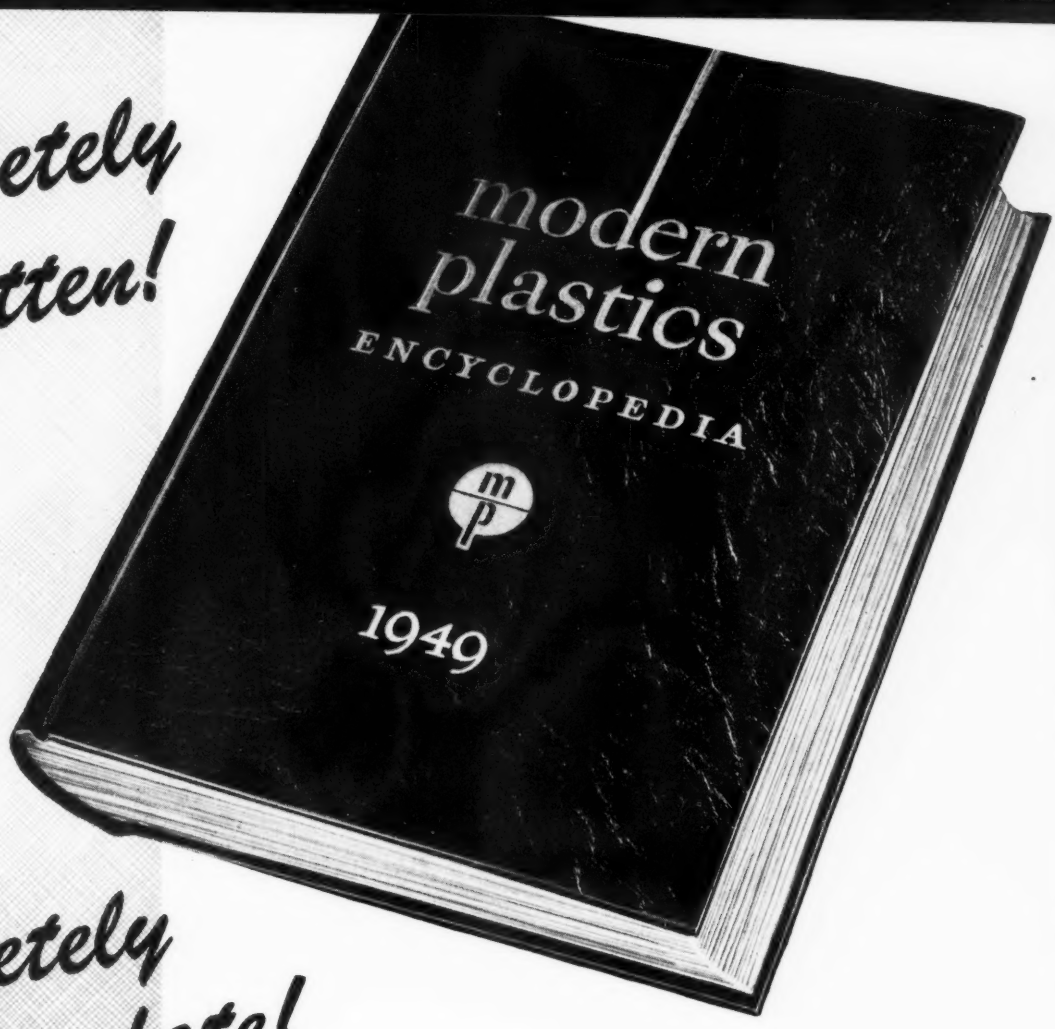

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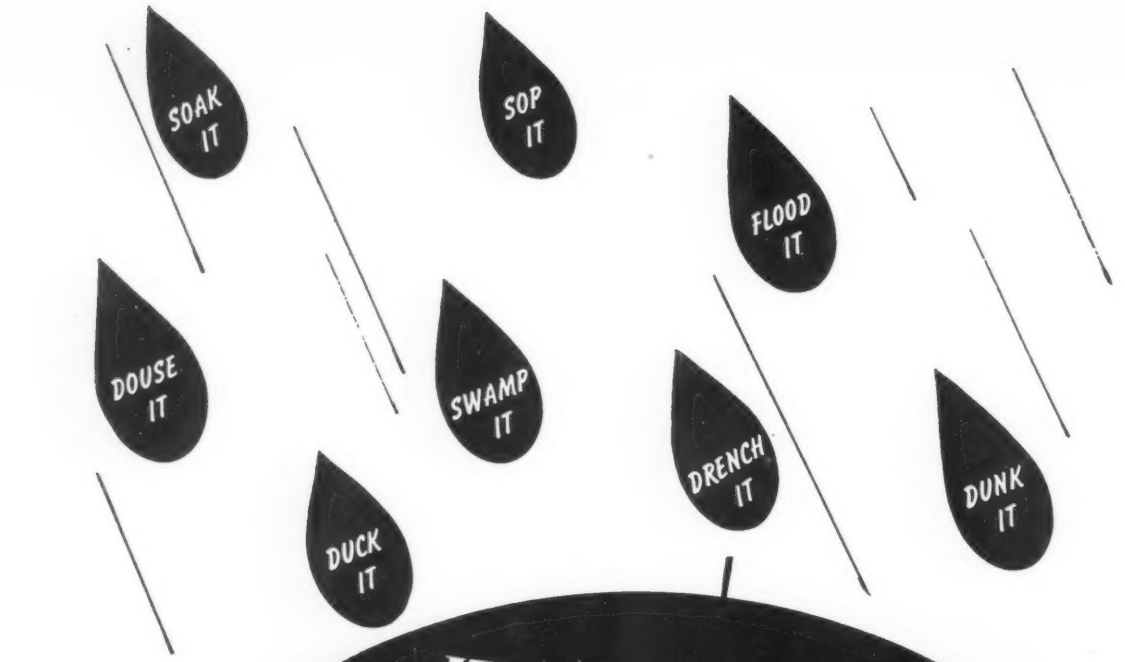

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Moisture meets its master in Stein Hall Waterproof Glues! What's more, there's a specific Stein Hall Waterproof Glue for your individual packaging needs...whether it must withstand condensation or a full fledged flood! And note these two exclusive Stein Hall developments: *These glues run clean at top speeds! These glues give off no odors!* For a quick solution to your waterproof glue problems...join the thousands of industries who always call Stein Hall!

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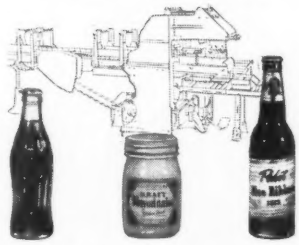
WHEN YOU *Must*
REDUCE COSTS — USE

STANDARD-KNAPP PACKAGING MACHINES

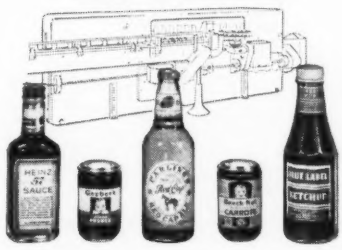
WHEN YOU'VE got to buckle down, when you've got to make every minute and every motion on your production line pay off, you can't afford ordinarily efficient equipment — you need Standard-Knapp packaging machinery. Whether you require just one machine, or a complete new packaging line . . . whether you use cans, bottles, or cartons . . . Standard-Knapp engineering and design experience assure cost-reducing efficiency for every packaging operation.

UNLOADERS



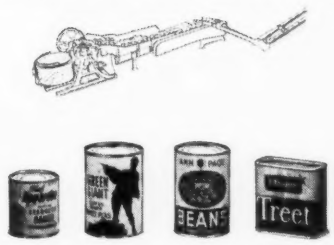
Remove glass containers from carton and place them in single file — or feed them into soakers and washers.

WASHERS



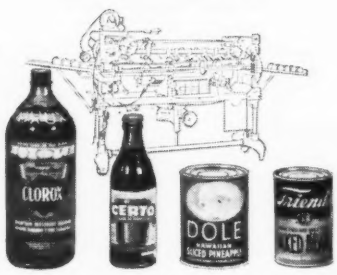
Provide fast, continuous delivery of washed new glass containers, without thermal shock.

UNSCRAMBLERS



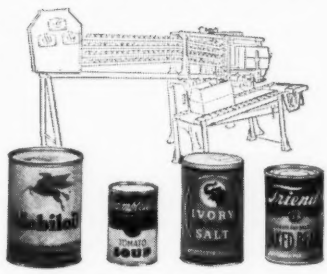
Rapidly arrange cans dumped from crates in single file at operating economies that quickly pay for machines.

LABELERS



Apply labels with speed and precision, to afford good package appearance at minimum cost.

CAN PACKERS



Place cans quickly and gently into shipping cases in a smooth, cost-saving operating sequence.

BOTTLE PACKERS

Automatically pack bottles into trays or cases, and pay for themselves in efficiency.

CARTON PACKERS

Automatically pack cartons of all sizes and shapes into display or shipping cases with maximum speed and economy.

GLUERS AND SEALERS

Apply glue to the carton or shipping case, not to the contents; insure strength with neat, economical sealing.

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How are you scoring *on effective packaging?*

Are you using transparency? Today, more than ever, shoppers are out for value, and Cellophane transparent packaging lets them *see* value . . . stimulates impulse sales.

Are you getting proper protection? A packaging material should protect the original quality of the product on its journey to the consumer.

Are you realizing low cost? Economy is one final test of a package's effectiveness. Does it do its selling and protective job at low cost . . . and with peak efficiency on automatic packaging machinery?

Our field representatives and the converters of Cellophane welcome the opportunity to work with you in developing new packages or improving your present package. Just write E. I. du Pont de Nemours & Co. (Inc.), Cellophane Division, Wilmington 98, Delaware.

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Shows what it Protects—Protects what it Shows

—at Low Cost

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25th ANNIVERSARY
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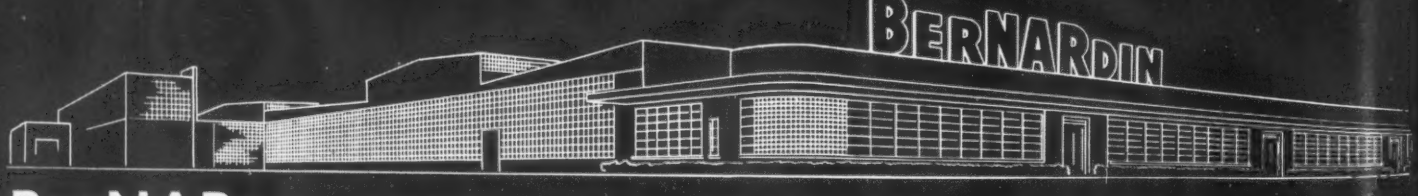
Would the consumer choose the closure you use

BERNARDIN *Convenience* CLOSURES IN METAL AND PLASTIC

Never lose sight of the consumer when you package Your product...



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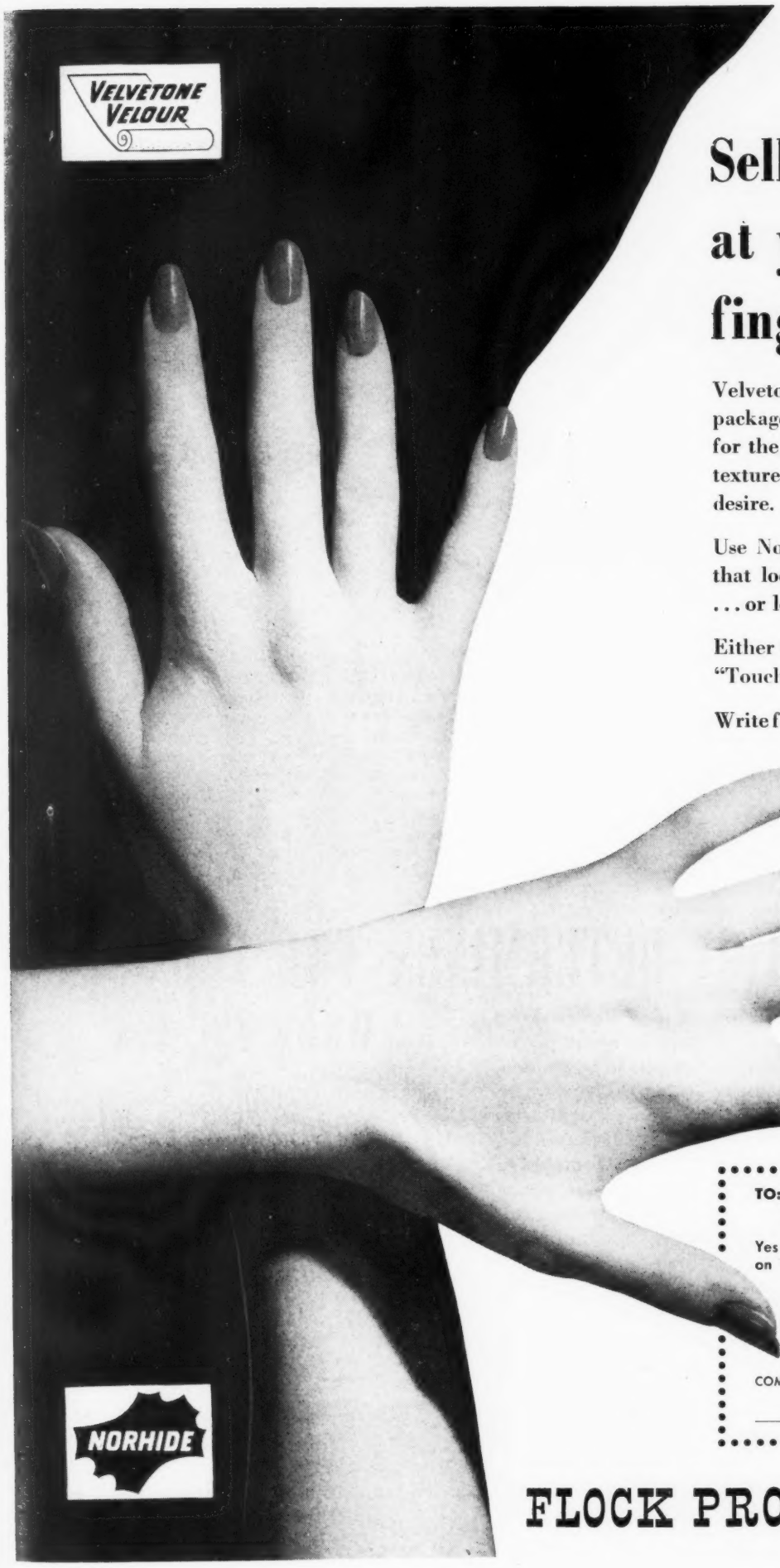

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Velvetone Velour Paper will do for your package and displays, what cosmetics do for the face of a girl. We make this soft textured Velour Paper in any color you desire.

Use Norhide, our supple, pliable fabric that looks and feels like natural suede. . . . or let us flock YOUR article directly.

Either way, we can give your product the "Touch of Luxury".

Write for samples and information today!

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NORWALK, CONN.

Yes . . . send swatches and full information on Velvetone Velour Paper:

NAME_____

ADDRESS_____

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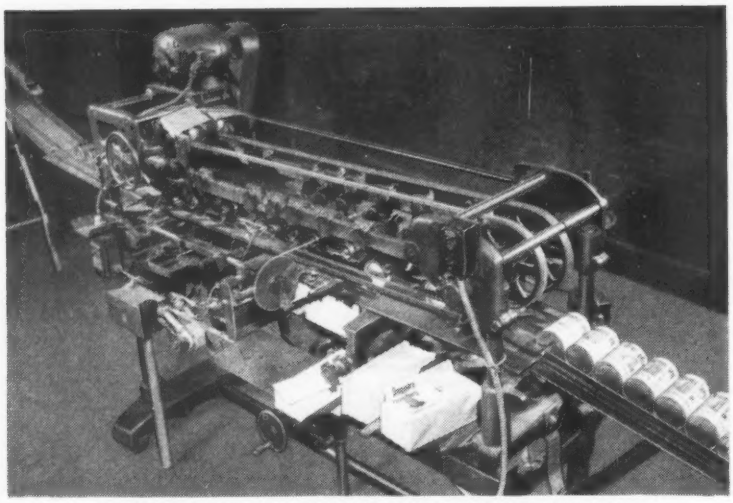
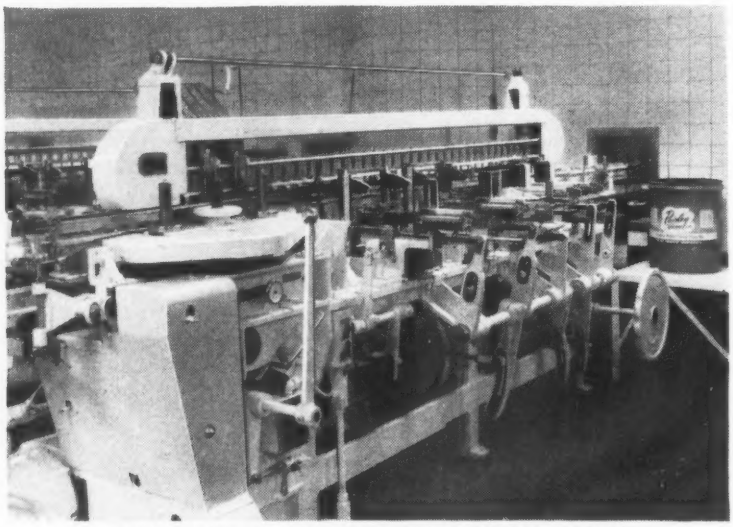
FLOCK PROCESS CO., INC.

NORWALK, CONN.



LABELING CANS ON STANDARD KNAPP LABELING MACHINE



LABELING JARS ON PNEUMATIC SCALE LABELING MACHINE

Free

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WHEN YOU USE . .

WHATEVER your adhesive operation "Put it up to Paisley!" Regardless of (1) the type or speed of machine or hand operation; (2) kind of materials to be bonded; (3) type of container surface to be sealed or labeled, or other consideration; you can depend upon our laboratories to develop the *one best* Adhesive for the job. Determining the formula and maintaining absolute quality controls in each succeeding shipment, will not cost you one penny more. We invite you to use this *free* Paisley Scientific Adhesive Service. Just send for our Adhesive Operation Data Sheet. It's a very convenient form which you fill in and return. Upon receipt, our skilled adhesive engineers will quickly study your problem and make specific recommendations. If you want *better results* in your gluing or packaging operations, don't wait . . write for your Data Sheet TODAY!

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SCIENTIFIC ADHESIVE SERVICE

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"try Milprint" "follow through" service . . .

300 MST Cellophane envelope

HERE'S HOW IT WORKED FOR THE TRUE MANUFACTURING CO.

It all started with printed cellophane envelopes for Tru Maid hosiery and lingerie to remind the consumer of the quality, style and freshness of the merchandise. Designed and printed by Milprint.

Retail clerks have to be sold before they can sell. Tru Maid lingerie packages are shipped in 1/3 dozen boxes, so Milprint suggested a box overwrap that conveys the Tru Maid quality story to clerks and purchasers alike. Designed and produced in Milprint's Lithographing Division.

A colorful easeled counter card to catch the shopper's eye completes the point-of-sale program. Convenient and usable in size (8½" x 12") designed and produced by Milprint's Lithographing Division.

Lithographed Box Overwraps

AND THAT'S NOT ALL. . .

Milprint followed through by writing, designing, and printing a Tru Maid dealer mailing piece and a consumer folder to be used as an envelope stuffer by retailers.

Milprint can help you sell *your* product better too with "Follow Through" service from packages to promotional material. "Follow Through" service costs you nothing extra.
Call your local Milprint man or write today.

Lithographed Counter Card

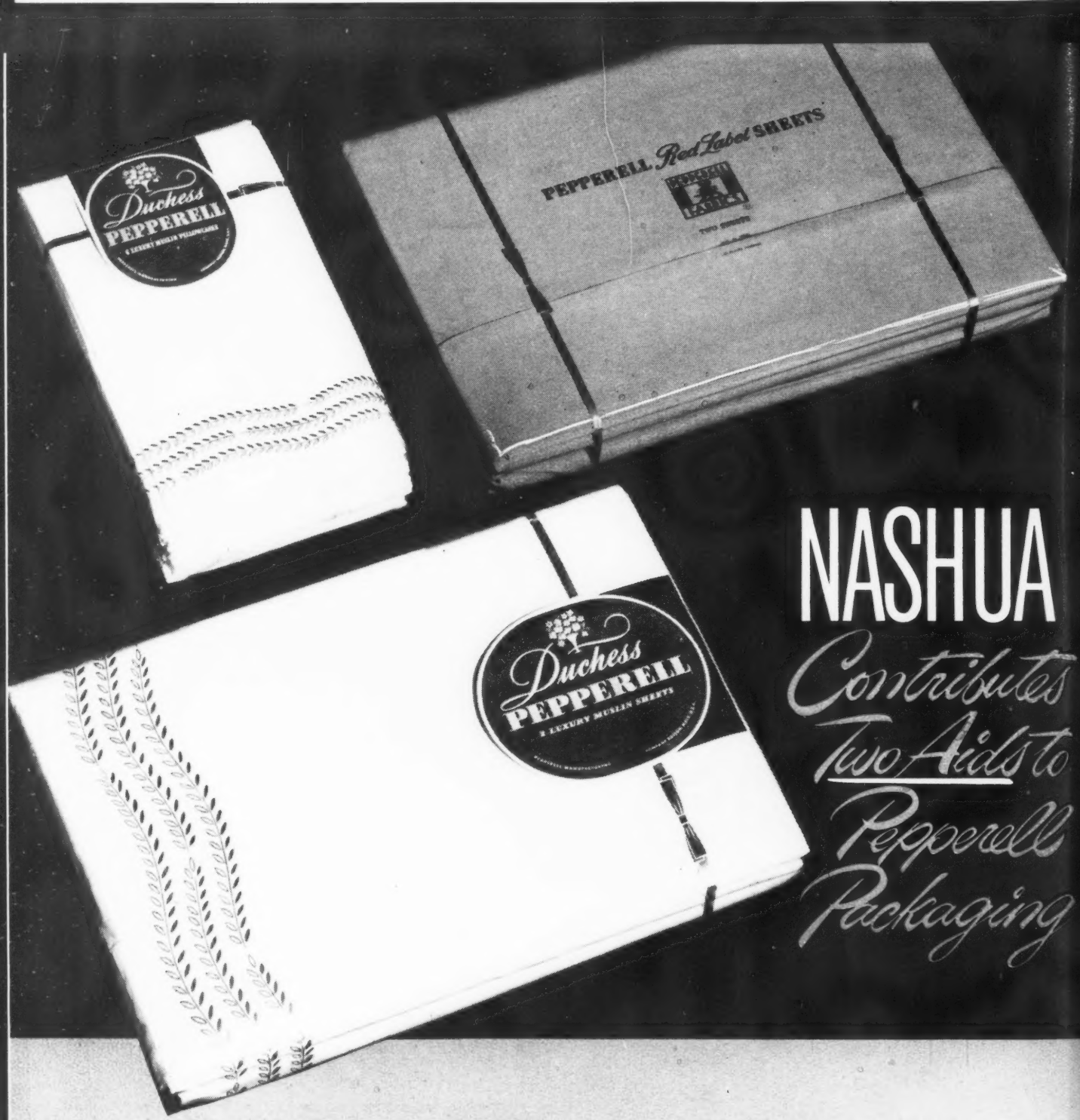
Milprint INC.
PACKAGING MATERIALS
LITHOGRAPHY & PRINTING

GENERAL OFFICES, MILWAUKEE, WIS.
SALES OFFICES IN ALL PRINCIPAL CITIES

This insert produced by Milprint Inc., Lithographing Division

1949 OUR 50th YEAR

Printed Cellophane, Pliofilm, Acetate, Foil, Glassine, Plastic Films, Lithographed Displays, Printed Promotional Material



...PERVENAC* LABELS—PRINTED PLIOFILM**

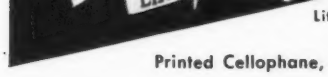
Among many advantages, Pliofilm offers the priceless benefit of transparent eye-appeal in a material unaffected by temperature changes and shipment shock. Could it be printed on handsomely and labeled with a paper that would *adhere?*

Working closely with Pepperell and Goodyear, Nashua applied its DOUBLE KNOW-HOW in printing and labeling. Result: a colorful printing job that speaks for itself plus a fast, *positive* bond minus glue streaks with Pervenac WP-1, Nashua's "news-creating" heat seal label paper. Pervenac also provides individual identification for Pepperell's smaller volume items which do not warrant printing on Pliofilm. If you are considering the use of printed Pliofilm or have a problem labeling wet or dry glass, paper, wood, metal or plastics, write Nashua's Sales Department.

*Trade Mark (Formerly Thermo-Kote)
**TM The Goodyear Tire & Rubber Co.

NASHUA GUMMED AND COATED PAPER COMPANY
NASHUA, NEW HAMPSHIRE

NASHUA
MAKES PAPER MAKE MONEY FOR YOU



Lithographed Counter Card

Printed Cellophane, Pliofilm, Acetate, Foil, Glassine, Plastic Films, Lithographed Displays, Printed Promotional Material

Modern packaging

Vol. 22 No. 10 June 1949

TRADEMARKED PAPERS

ON WRAPS AND BOX PAPERS, A SIMPLE BUT MEMORABLE PRIVATE DESIGN IS AN INCREASINGLY POPULAR, INEXPENSIVE WAY TO BUILD BRAND RECOGNITION

Many times it has been pointed out that package surface can be one of the best of advertising media—for free.

There is no better proof than the increasing use of what are called private-design or trademarked papers for wrappings, box coverings and liners. No longer are manufacturers and retailers content to use tons of blank paper. Today this surface space is being used to carry the selling message beyond the point where other advertising leaves off.

Probably the largest volume users of private-design papers are the department, chain and specialty stores. From coast to coast not only large stores, but smaller

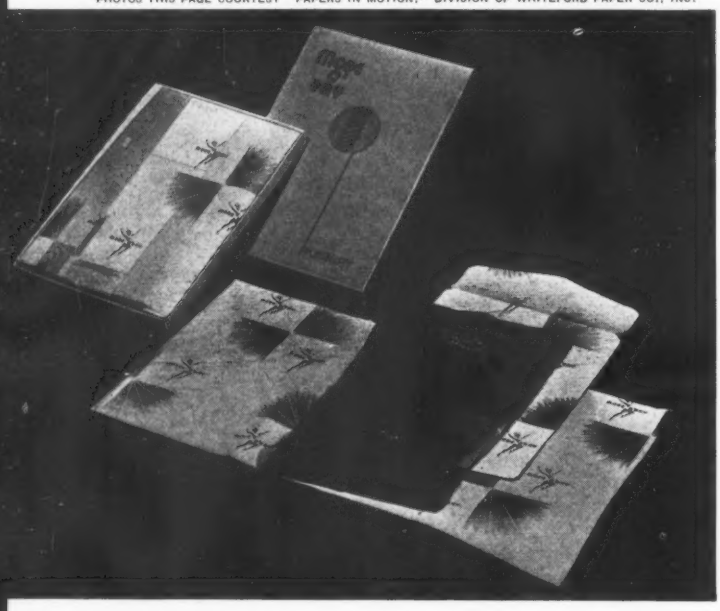
FAMOUS NAMES on papers for many diverse packaging purposes. The Timken, Wear-Ever Aluminum and the Fostoria papers are machine marked. The RCA Victor paper is embossed. All of the others are printed. SAMPLES COURTESY THILMANY PULP & PAPER CO. AND RIEGEL PAPER CORP.

ones, are learning that a distinctive wrap or box covering is a walking advertisement wherever it goes. One large chain and mail-order house last year used more than eight carloads of privately designed box-covering paper for the holiday season.

Many stores have built entire promotions around their private-design wrappings and guard the exclusiveness of their designs zealously. Sometimes these papers do not even carry the store's name—particularly if they are used for gift wrappings—but depend on the individuality of the design for association with a particular store. Gift wraps used by such stores as Lord & Taylor, Sak's Fifth Avenue and Bonwit Teller are examples.

Private-design papers are also assuming a much more prominent place in the packaging programs of manufacturers. Many industries are becoming aware of the additional promotional advantages of specially printed papers, as well as aluminum foils, cellophane and plastic films, used not only as wrapping and box covering, but as inner packings and box linings.

PHOTOS THIS PAGE COURTESY "PAPERS IN MOTION," DIVISION OF WHITEFORD PAPER CO., INC.



HOSIERY PACKAGING today is built around coordinated trademarked designs adaptable to inner tissues, take-home envelopes, sometimes cover paper. Here the take-home envelope serves as a stiffener for the hosiery. The tissue acts as a wrapper when hosiery is put in envelope.

SHOE TISSUES get brand name before the customer trying on shoes. Miles Shoe Stores coordinate shoe tissues with hosiery packaging, using same design, but changing color of printing.

Shoes

Shoe firms are learning that trademarked printed tissues around shoes, inside the box, offer an excellent means of getting brand name before the customer. Usually when a customer goes to buy a pair of shoes, the salesman opens the box, slips the lid over the bottom and puts the box on the floor so that all identity is concealed. But when the tissue inside the box carries the shoe manufacturer's name, the customer can't help but see the brand name of the shoe she is examining.

Lingerie and gloves

Packaging papers in the lingerie field have the same brand-promotion potentials. When a sales person takes a box off a shelf to show contents to the customer, both customer and sales person are conscious of brand name if it is printed or embossed prominently on both cover paper and inner wrapping. The same goes for trademarked tissues for gloves, which in by-gone years used to be blank.

Hosiery

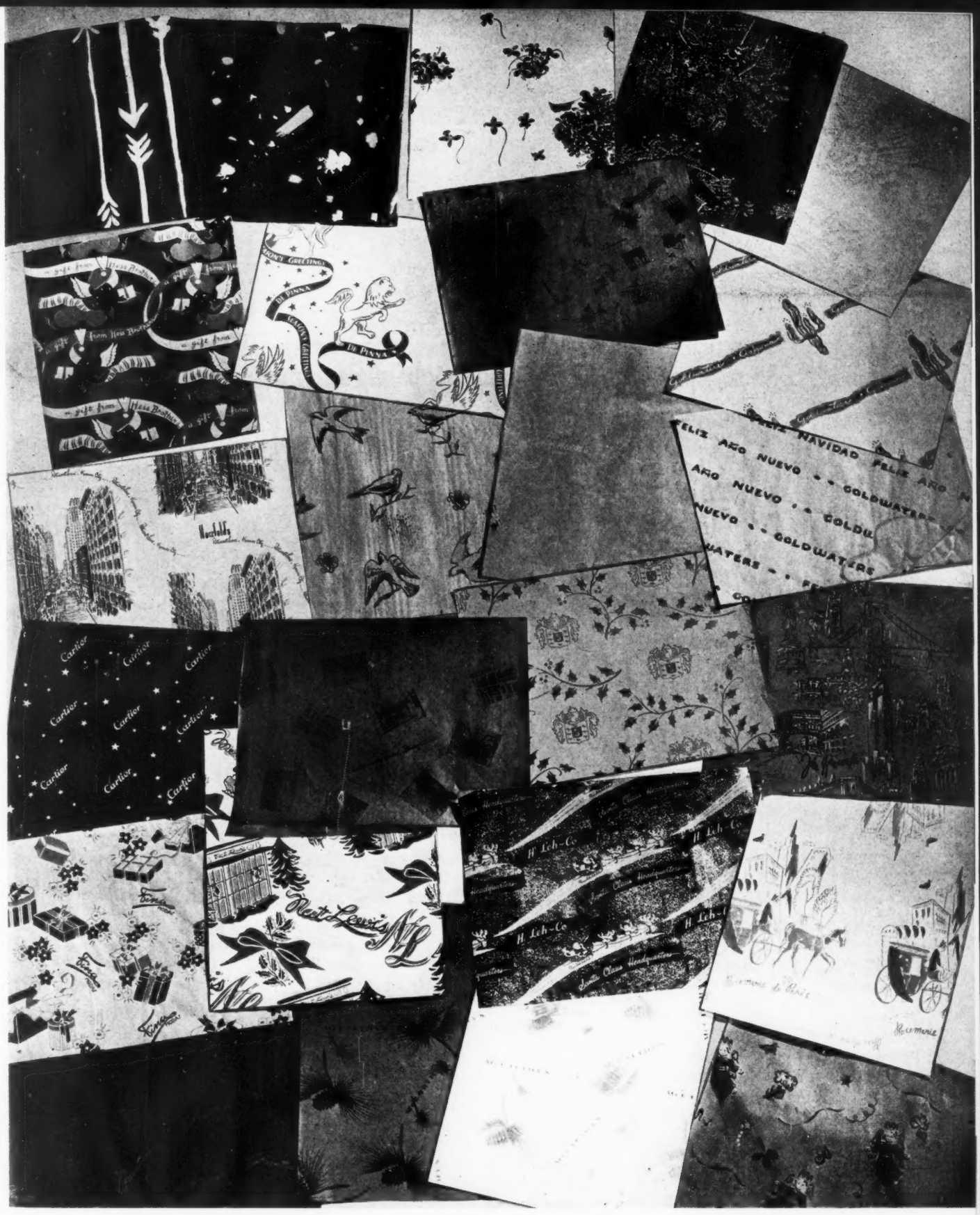
Hosiery firms today are almost universal users of trademarked papers. Every progressive firm builds its packaging program around a coordinated trademark design which can be reproduced on box-cover paper and adapted to the inner tissues or cellophane. When the saleswoman removes a pair of stockings from a box, she usually puts the stockings in their trademarked wrapper right into the envelope for the customer to take home, thus delivering the company's brand name right to the point of use.

Some firms are even supplying trademarked printed paper envelopes with their stockings which sales people can use for the take-home wrap-up—thus adding another brand-promotion feature on the paper involved in the purchase.

Industrial yarns

So far-reaching is the effectiveness of trademarked paper that it has even been known to build wider acceptance for industrial yarns among mill workers. Yarn firms formerly wrapped their cones of industrial yarns in blank paper. During the last few years several firms have begun wrapping the cones in printed trademarked paper.

One firm discovered that its mill workers were asking for the yarn wrapped in the trademarked paper, saying it was better than others. To determine how much the workers were influenced by the privately



WALKING ADVERTISEMENTS are these private-design papers for leading stores. Small samples are shown. Two at top left are for Lord & Taylor, New York. Violet design (top center) is exclusive for Bonwit Teller, New York. Names on the others are identifiable in the photographs. Designs show much individuality—from scenes of local interest to holiday messages in Spanish (Goldwaters, Phoenix, Ariz.). Some of the wraps are of paper-backed aluminum foil. SAMPLES COURTESY "PAPERS IN MOTION," DIVISION OF WHITEFORD PAPER CO., INC.; ROYAL PAPER CORP.; REYNOLDS METALS CO.; LACHMAN-NOVASEL PAPER CORP.

ENDLESS VARIETY of merchandise benefits by display of signature and trademarks on wrappings. Note how curtain wrap carries washing instructions and blanket paper has directions for unpacking. SAMPLES COURTESY "PAPERS IN MOTION," DIVISION OF WHITEFORD PAPER CO., INC.; BRADNER SMITH & CO.; MILPRINT, INC.; E. W. TWITCHELL, INC.; THILMANY PULP & PAPER CO.

printed paper, this company shipped quantities of yarns to the textile mill in both printed and unprinted wrappings. The yarns in both types of packages were exactly the same, but the workers insisted the yarn in the printed paper wrappers was better and continued to ask for it.

Confectionery

Confectioners have long known the effectiveness of trademarked papers and today more than ever they are working out coordinated family packaging programs around private-design papers for box coverings and inner liners of related and integrated design. Barton's in New York has just completed what it calls its "Colorama," first introduced as a design on paper-backed, gold-colored aluminum foil for its New York Jubilee package. The same design, which pictures the confectionery ingredients—strawberries, cherries, rum—with stylized drawings of Barton store fronts, etc., has now been introduced with both black and silver backgrounds for different boxed assortments. The trademarked paper design also ties in with the company's lithographed metal gift boxes.

Individually wrapped candies and bar candies also offer wide opportunity for the application of private-design papers.

Food packaging

Special-design papers are moving into food packaging more extensively. Practically all butter wraps today are printed. The new foil butter wraps offer excellent opportunity for the beautiful effects that can be

achieved by embossed designs. Foil for cheese wraps is also getting new treatment with interestingly designed all-over embossed patterns.

Automotive parts

Makers of automotive parts are beginning to use trademarked printing and embossing to identify protective wrappings. They have discovered that what previously was blank surface can be utilized effectively to carry the company's name right to the user. When the name of a maker is remembered by a satisfied customer who has seen it on the wrapper, the chance of a repeat purchase is excellent.

The above examples in widely diverse fields indicate to some extent the vast possibilities for the use of trademarked wrappings. Hundreds of others could be listed.

Liquor, wine and beverage bottles can be given greater distinction when bottles are top-decorated with trademarked foils. In the field of home furnishings, private-design wrappers are helping to give brand identity to rugs, curtains, sheets, bath accessories, electric blankets and other electrical appliances. Exclusively designed papers are an essential part of the identification of cosmetic and perfumery packages. Specially printed tissues give distinction to hair brushes packaged in boxes. Even items as large as matresses are now being packed in privately printed, heavy kraft papers that call attention to brand name and create a package with greater eye appeal.

Variety of effects

In no other phase of packaging is the user offered a wider variety of effects than in the selection of trademarked wrappings, depending on the purpose for which they are to be used. Private-design wrappings may be made of almost any kind of paper from the sheerest tissue, glassine or greaseproof papers to the finest grades of coated papers, as well as heavy kraft. They may be made of aluminum foil, or paper-backed aluminum foil, printed cellophane or printed plastic film. They may be used primarily for protection, as in the

PHOTO COURTESY "PAPERS IN MOTION."

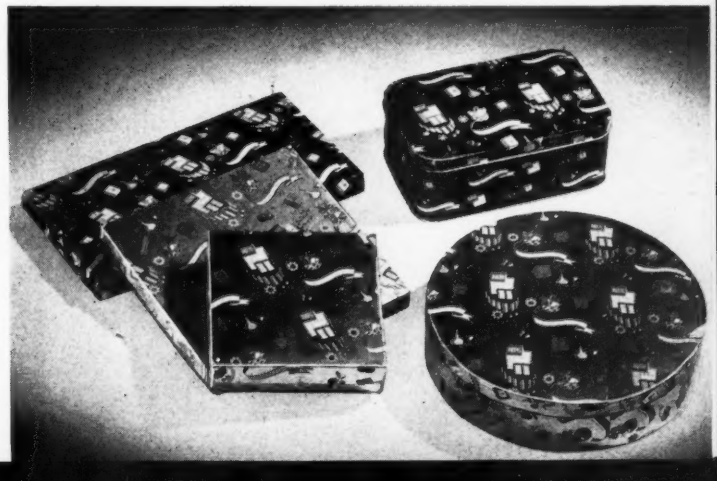
COORDINATED STORE PROGRAM for Buffum's, Long Beach, Calif. Appropriate design of shells, starfish, etc., is reproduced on tissue, on set-up gift-box cover paper in gold and white; on folding boxes in brown and green; on every-day set-up boxes in blue on chartreuse; on bags in brown and green. Match books and "Ask Mr. Foster" travel folders carry same design theme.

PHOTO COURTESY REYNOLDS METALS CO.

BUTTER WRAPS are almost universally identified today with the maker's name—printed if parchment, often printed and embossed if foil. Photo shows a current printed-embossed foil wrap.

YARN CONES in trademarked paper wraps are more favorably received by textile mill workers than those with unidentified wraps. Workers insist yarns in branded packages are better than yarn in unidentified packages for which they do not know maker's name. PHOTO COURTESY "PAPERS IN MOTION," DIVISION OF WHITEFORD PAPER CO.

CONFECTIONERY FAMILY just completed for Barton's in New York. Wraps are paper-backed silver- and gold-colored foil, as well as a paper printed in same design with black background. Design pictures candy ingredients and drawings of Barton store fronts and candy boxes. SAMPLES COURTESY MILPRINT, INC.; REYNOLDS METALS CO.



case of a butter or candy wrap, or they may be solely for decoration and signature identity.

They may be machine marked, embossed or printed embossed. They may be printed by letterpress, gravure, aniline, silk screen or lithography. They may be produced in one color or in as many as seven or eight colors, depending on the desired effect and the amount of expenditure that is justified by the effect.

Costs and quantities

Alertness of enterprising paper converters has encouraged the development of this useful phase of packaging. Their efforts have been largely responsible for the improved methods of production that have brought usage within reach of a large number of customers.

Obviously, a substantial quantity of private-designed paper must be ordered before it is feasible for application, since initial production involves the use of specially prepared engravings, rubber plates or other production aids, which must be added to the cost of the paper.

Such costs are variable depending on the type of art and color work involved, the kind of plates required and the type of printing used. Some firms say that one-color printing on tissue paper adds from 10 to 25% to the cost of the tissue. This may sound high until it is known that tissues, in a typical size, average about $1.60 per thousand, so that 25% additional amounts to only $40 on 100,000 sheets—a small price to pay for 100,000 separate pieces of personalized advertising that go directly into the hands of the consumer.

For other types of trademarked papers, suppliers say that initial orders must be from two to four tons, depending on the type of art work, color and plates involved. Stated in other terms, this means 24 to 50 reams of 500 sheets 26/20. Most converters are equipped to supply the papers in rolls, as well as in sheets if this is desired. Rotogravure-printed foil wraps or box coverings require 50,000,000 sq. in. for an initial order; signature-embossed foil, an initial order of 250 pounds.

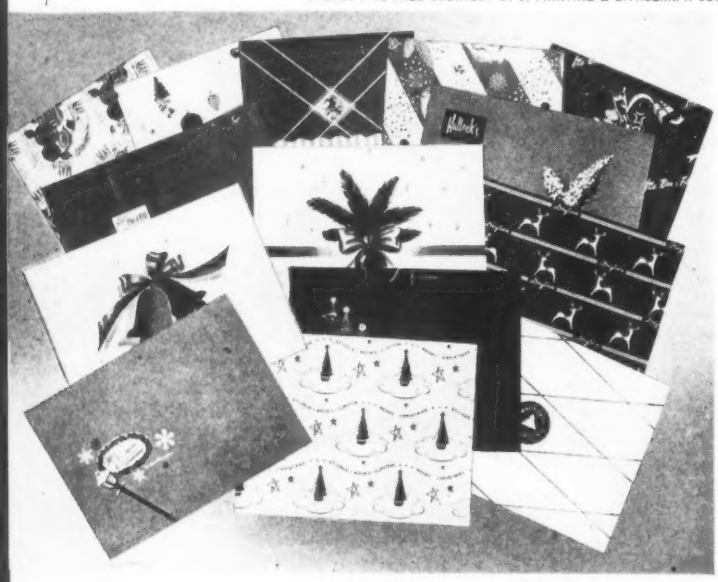
The promotional value of exclusively designed papers for name-building of shoes, hosiery, lingerie, home furnishings, confectionery, etc., as well as for getting a store's name before its shopping public, is so great that many firms have been willing to allocate the printing costs of the papers to advertising and promotion expense.

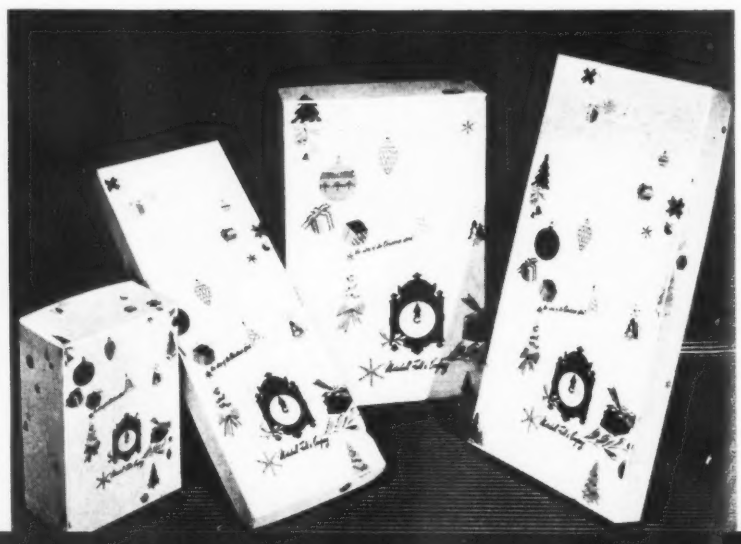
Designs

Good design is the essence of success of privately printed wrapping material. During the last few years, converters have been concentrating on improved design services to meet the increasing needs of their clients.

Trademarked papers demand the designer's best skill to develop properly stylized motifs that tell a trade-name story with distinction. Sometimes there is opportunity to introduce well-known trademark symbols; other times, a chance to incorporate symbols associated with product uses, such as spinning wheels with threads, baby carriages (*Continued on page 192*)

PHOTOS THIS PAGE COURTESY U. S. PRINTING & LITHOGRAPH CO.





LITHOGRAPHED DESIGNS are used by many of the country's largest stores for Christmas box wraps. Because of variety of sizes, the printing must be carefully planned for arrangement of design. Top photo shows a variety of designs, some exclusive and some on an exclusive-one-to-a-city basis. Santa Claus design was used exclusively last year by Sears Roebuck. The famous Marshall Field & Co. clock was stylized for that store's Christmas box paper last year.

Old Charter's clock

LOW-COST REPRODUCTION OF AN ANTIQUE CLOCK DRAMATIZES WHISKEY'S SLOGAN AND PROVIDES DISPLAY PIECE THAT WILL WIN A PERMANENT PLACE IN ANY BAR

Very often point-of-sale display pieces for packaged products, while they achieve their purpose of intriguing the attention of the customer, are not part of an integrated program that ties in with promotion and advertising which has already brought the item to the consumer's attention. When the display picks up from the point of advertising and carries through to point of sale, greater impact results.

Schenley Distillers, for its Old Charter straight bourbon, followed the physchology of a related advertising-display program by developing the three-dimensional, back-bar electric clock shown at the right—a molded wood plastic replica of an antique French clock featured in nationally distributed magazine advertisements—accomplishing a distinctive and effective tie-in of the two mediums.

The walnut finish given to the display clock is so realistic, even to the detailed grain of the wood, that it might be mistaken for the actual antique model from which it was copied.

In 1944 when postwar advertising plans were being formulated for Old Charter, a basic idea conceived by Schenley's advertising agency, McCann-Erickson, Inc., New York, was for a campaign tied in with illustrations of period clocks and based on the message that bourbon was "quietly aged to perfection."

A Louis XV clock from the collection of Count Pelouel—exhibited at the French Pavillion in the World's Fair and reproduced in the first advertisement—was selected as the model for the display. The agency submitted sketches of proposed designs, changed from the model only to make it a hanging clock instead of a mantle design. From the sketch selected by Schenley, the display was developed.

Considerable research was done by the makers of the display to authenticate their design development. A full-sized, hand-carved model was submitted—complete in all details, including the period clock hands and dial. Production samples, made on low-cost dies, were submitted to Schenley in a variety of finishes—silver, gold, mahogany, walnut, oak. Walnut was chosen as the finish that would harmonize best with the majority of men's bars, since they are usually finished in dark woods.

Tying in with the basic theme of all newspaper and magazine ads, the display has the slogan, "the whiskey that didn't watch the clock," molded directly on the clock and colored in gold. The molded wood plastic shell, with its die-cut hardboard backing makes the clock light in weight, despite its massive, heavy appearance. The over-all dimensions of the clock are 18 in. high by 11 in. wide by $3\frac{1}{2}$ in. deep.

RESEMBLANCE of molded wood plastic replica to the actual antique French clock is striking. This photograph shows Old Charter clock displayed in the bar of Wood Hotel, Syracuse, N. Y.

The clocks are made available to local distributors of Schenley products for assignment to retailers in their areas. The response received from company's salesmen when availability of the clocks was announced was so great that re-orders had to be placed almost immediately. Considering the length of time the display clock will probably be used and the types of locations that will carry them throughout the country, the initial cost of the display pro-rated over a considerable period of time becomes infinitesimal from the standpoint of advertising expenditures.

CREDIT: *Molded wood plastic (Syrocowood) clock display, Advertising Display Division, Syracuse Ornamental Co., New York.*

Returnable cream whipper

FIRST HOME-DELIVERY PACKAGE IN THIS EXPANDING AEROSOL FIELD IS A HEAVY METAL CAN, SEALED IN A WET-STRENGTH PROTECTIVE PAPER BAG

"PROFESSIONAL" container is made of enameled steel. Cream is dispensed in whipped state by pressure of nitrous oxide gas. To protect exposed plastic dispenser spout from contamination, identify product for door-to-door distribution and instruct customers on its use, the paper bag as a wrap was added. Containers are returned and re-used as many as 36 times.

Consumer packaging of whipped cream topping in pressurized containers is one of the year's biggest developments in the dairy industry, but until recently distribution has been limited to sale through retail stores.* Now Philadelphia housewives are getting the self-whipped cream topping delivered right to their doorsteps by their milkmen, in returnable containers—the same kind of "professional" dispensing containers used for years in drugstores and restaurants, but delivered to these new customers sealed in special wet-strength protective paper bags.

Philadelphia Dairy Products Co. and Aerated Products Co. of Philadelphia, local processors of Instantwhip—claimed to be the original aerated whipped cream topping—have combined operations on this marketing project, which in a short time has proved highly successful. Philadelphia Dairy supplies the whipping-cream mix to Aerated Products Co. and distributes the topping as part of its Aristocrat line of dairy products. Aerated Products processes the cream mix at its plant, packing it in the same dispensing container holding seven fluid ounces that has been used

DECAPPING. At the processing plant where returned containers are sent by the dairy, the "empties" are bled of excess gas before the ring nut is loosened. Tops, together with the valve unit and feed tubes, are racked separately from the steel bases for the cleaning process. While initial cost of returnable container is higher than non-returnables, eventual cost is said to be lower.

* See "Cream-Whipping Can," MODERN PACKAGING, Dec., 1948, p. 100.

since 1936 when Instantwhip was first introduced to institutional and commercial users. By this arrangement the diary is relieved of the expense of installing the aerating equipment and buying the containers and is able to offer the increasingly popular whipping package to its customers for less money than they can buy it in the store.

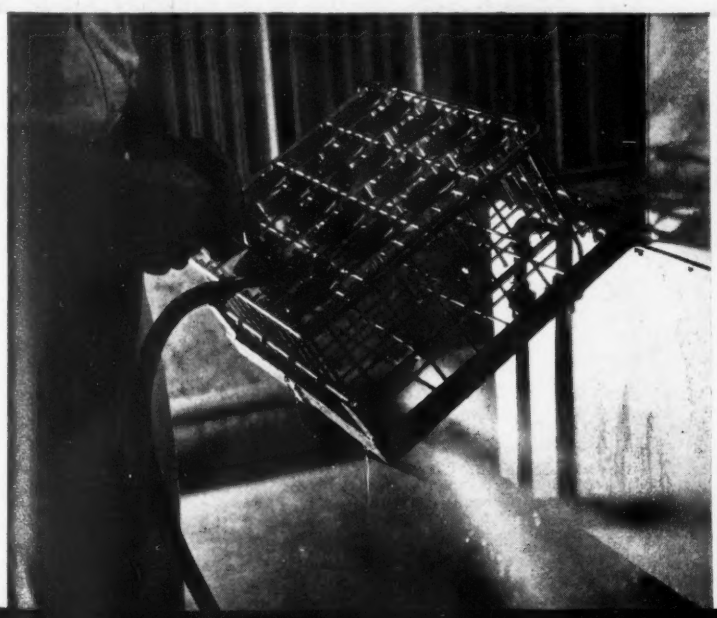
The great advantage of the returnable container—in contrast to the expendable container previously used in Chicago and elsewhere—is cost. The light-weight metal throw-away containers which other dairies have adopted are said to cost from 14 to 20 cents each and this cost must be added to the cost of each package of pressurized cream. While the Instantwhip container is more expensive initially, it can be re-used a number of times. Some containers last as long as four or five years, it is claimed, with the average number of trips from plant to user being approximately 36 a year. Philadelphia Dairy retails Instantwhip in the dispensing container for about 45 cents—one cent more than a half-pint of heavy cream—and this price includes the cost of house-to-house delivery. Competitive brands in throw-away cans sell between 49 and 53 cents. Even considering the problem of loss from no-returns, the Instantwhip container at $1.10 proves less expensive. Philadelphia Dairy officials say if it makes only seven trips before being lost, the cost as compared with seven throw-aways has been met. Because neither Philadelphia Dairy nor Aerated Products could foretell just what the situation on returns would be with house-to-house distribution, the arrangement included a provision for allowing the dairy a 1% loss automatically, with a charge for losses over that number.

In working out the cooperative project, the two companies ran into such problems as (1) protecting the exposed dispenser mechanism from contamination during delivery to meet Board of Health requirements, (2) establishing the dairy's brand identification, (3) educating the housewife to put the empty container out with her empty milk bottles for pick-up, (4) instructions for use and (5) eliminating all possibilities of the filled containers being tampered with during distribution. The only identification marks on the container itself are the Instantwhip name, company and patent registration numbers, which are stamped on the top of the metal closure.

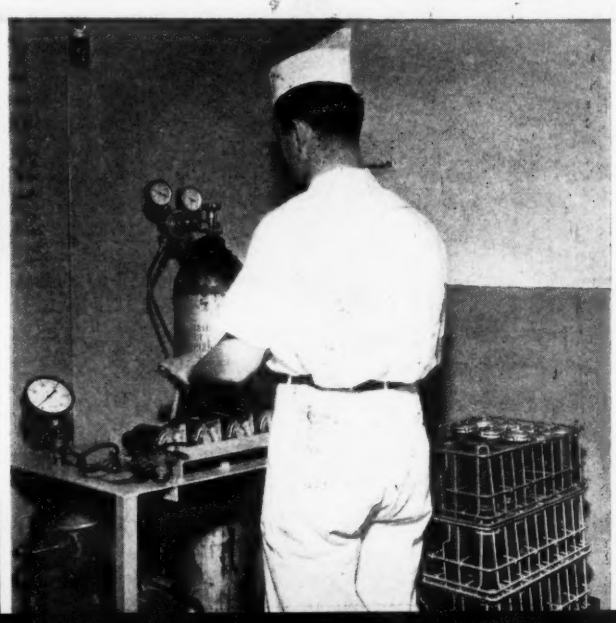
As long as the regular Instantwhip container was used for drug stores and restaurants, the dispenser mechanism was delivered separately with the container, the valve being protected by screwing a small dust cap over it. However, this procedure obviously was impractical for the consumer delivery. The dairy wanted to simplify things for the user by delivering the container completely assembled with the dispenser already in place. This meant that some type of outside cover had to be added to protect the dispenser from contamination and moisture, since the containers are kept in refrigerated storage and are iced during delivery.

The idea of using a paper bag was conceived by Lee Cahill, manager of Aerated Products, because it could have all the necessary brand identification and instructions for use printed on it. Mr. Cahill thought originally of using a dry, wax-coated bag as a jacket just over the top part of the container and sealing the bag to the container with pressure-sensitive tape. When he discussed this idea with a paper bag manufacturer, the manufacturer pointed out that this type of paper would not provide the wet-strength quality needed when the containers were iced. It was suggested that a complete bag made of wet-strength paper with a heat-sealing coating be used, the completely sealed bag affording

VALVE STERILIZATION. Steam is forced through each of the valves at approximately 40 lbs. of pressure as the final cleaning step after the tops have gone through the automatic washer. Bases of the containers are also subjected to a four-stage automatic washing and sterilizing process in similar wire racks. Local board of health requirements are strictly adhered to in all of the plant's operations.



VACUUMIZING AND GASSING. After having been filled with cream, four containers at a time then have the air evacuated and the nitrous oxide gas charge is added automatically. Thick walls of the containers are designed to withstand 1,500 lbs. of pressure and are charged to 185 lbs.—more pressure than is used with throw-away dispensers.



better protection against tampering and also being easier to add when the containers came off the processing and filling lines at the plant.

This suggestion was accepted. The bags now being used are a special type, made of bleached wet-strength kraft, super-calendered stock, coated on both sides with nitrocellulose lacquer.

Henry R. Geisinger, sales promotion and advertising manager for Philadelphia Dairy, supervised the layout of the copy and illustrations for the bag, giving emphasis in the copy to the fact that the container must be returned and illustrating with small diagrammatic drawings how to use the dispensing container. The bags are printed with red and black waterproof inks, heat dried so that the coating lacquer glosses over the printing.

The container consists of five pieces: cylindrical base, rubber gasket, top with valve unit including a tube, ring nut and dispenser. The drawn steel base, 5 in. high, has its surface coated both inside and out with a baked-on enamel which seals the "pores" of the steel. Edge of the base is rolled in slightly at the top to give a broader surface for the rubber gasket and the outer edge of the base is threaded at the top so that the ring nut which holds down the metal top can be screwed on. The specially designed valve is fitted and welded on the metal top. The plastic dispenser piece screws onto the projecting end of the valve and when the button or pin in the dispenser is pressed with the finger tip, the valve opens.

Basic patents for the Instantwhip process are held by Aeration Processes, Inc., Columbus, Ohio, which assembles the container parts in addition to applying the enamel finish on the bases. The method of pressurizing whipping-cream mix in the container with harmless nitrous oxide gas was perfected by G. Frederick Smith, now president of Aeration Processes, and Martin J. Prucha, professor of dairy bacteriology at the University of Illinois. This particular process involves evacuating the air from the filled container before charging the contents with gas. Because of the vacuumizing operation, the walls of the container have to be thick. Containers are filled with gas to 185-lb. pressure, more pressure than is used with the throw-away dispensers. After being filled, the containers are agitated briefly so that the pressure drops to 150 lbs. and, as the cream mix absorbs some of the gas in the first 12-hr. period after being charged, the pressure gradually decreases to 125 lbs. When the valve is pressed by the user, the topping flows directly from the container in a fluffy, whipped state.

The Instantwhip processing plant in Philadelphia is typical of Aeration's 49 processing plants throughout the country. Resembling in many ways a small dairy, the plant has washing and sterilizing equipment for cleaning the returnable containers. When the empty containers are brought back to the plant, the first step is to "bleed" the excess gas from them by means of a small device mounted on the decapping table. Once opened, the bases are stacked on wire trays and put through four-stage automatic washing and sterilizing machines where they are rinsed in warm water, subjected to a hot alkali washing solution, a clear water rinse and finally steam sterilization. The tops with the valve units are cleaned in the same way, but additional sterilization is given by forcing steam through each individual valve at 40-lbs. pressure. After the containers have been filled with the cream mix and the closure completed—the large nut ring is tightened by a wrench—four containers at a time are positioned on the machine which pulls the vacuum and then charges the containers. The paper bags are put on by hand and the package is heat sealed at the bottom by sliding it over a heated plate.

First announcement of the Instantwhip house delivery was made on a week-end through newspaper advertisements. Initially a total of 6,500 containers was allotted to selected routes of Philadelphia Dairy. In the succeeding three weeks over 21,000 deliveries were made, according to Mr. Geisinger. With the beginning of the fresh strawberry season, more advertising is being placed in newspapers and on the dairy's local television show the use of the container will be demonstrated in the commercials. Rate of return of the containers has been "very good" to date, even though no deposit has been charged. Best proof of success is the fact that even the routemen like the new addition to their Aristocrat line. It is understood that similar marketing arrangements will be possible for other dairy companies in other cities where there is a local Instantwhip processing plant, since the protective paper bags can be designed and printed to meet the requirement of any dairy.

LABELING is instructive. Made of bleached, wet-strength kraft paper, the bright white bag is printed in two colors with waterproof inks which are dried with sufficient heat to cause the heat-sealing coating to gloss over the printing.

CREDITS: *Bags made by Kehr Paper Products Co., Philadelphia, using MS wet-strength pouch paper of Riegel Paper Corp., New York. Container base and top, Buhl Mfg. Co., Detroit. Ring nut, National Acme Co., Cleveland.*

BASIC ELEMENTS of simplified packaging for RCA Victor's 7-in. vinyl records. Manila mailer at left conveys records of albums safely by parcel post. Color envelope at right is used for two-record sets. Miniature-sized box album, without pockets, holds three to six records.

Victor's plastic midgets

THE NEW, COLORFUL, 7-INCH RECORDS ARE BEING PRESENTED

WITH A COMPLETE PACKAGING PLAN THAT CUTS COST DOWN TO MIDGET SIZE, TOO

Coincident with the introduction of its new multi-colored, small ($6^7/_8$-in. diameter), 45 r.p.m. phonograph records, RCA Victor has developed a complete new packaging program, highlighting the colors of the translucent vinyl disks and the new size.

The packages—an important part of the over-all merchandising plan—are designed to emphasize that the new records will be a boon to the consumer in classifying, identifying and stocking recorded music in home libraries. The records with their smart, modern styling and spritely eye-appealing finishes come in seven colors including red, green, blue, yellow and cerise shades, each color indicating the type of music (classical, semi-classical, popular, rhythm, children's and Western).

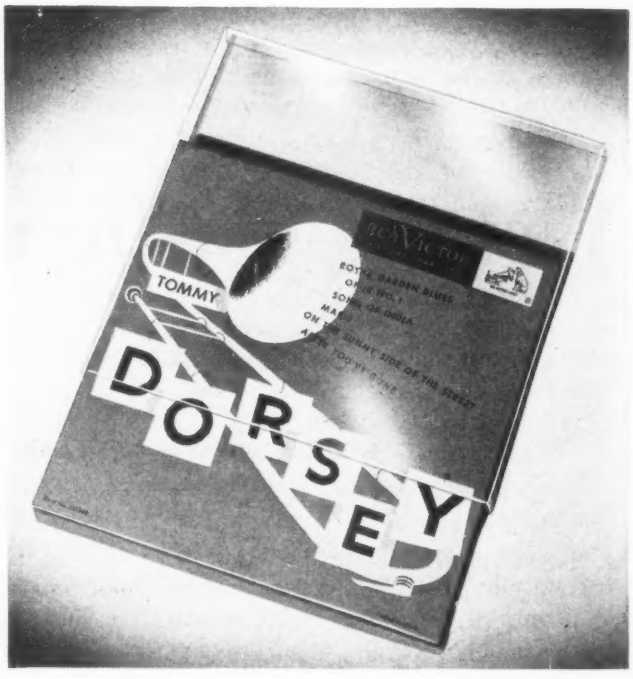
The new packaging capitalizes on the unbreakability and light weight of the flexible vinyl plastic disks to effect a 50% saving in packaging costs—aided also by the fact that the records are standardized into one single size for all types of music. Many of the packages are planned so that the record can be shipped through the mails, using parcel post.

Getting literally hundreds of thousands of the new packages made, filled and shipped to dealers in a very short time to meet a competitive situation was a crucial factor in making the nation-wide introduction of the new records a success. Details of each package were worked out months ahead of time and orders for the packages were carefully scheduled to assure that on "D Day" adequate supplies were on every RCA Victor dealer's shelves. Packaging lines at the record manufacturing plant in Cannonburg, Pa., and Indianapolis were revamped to handle the records. The speed and ease with which the operation was accomplished is a tribute to efficient planning by RCA Victor's packaging engineers and purchasing department.

A feature of the packaging program is the adoption of a box-type album without inside pockets. Heretofore, a box-type album with pockets has been used, but only as a special record package because of cost (see MODERN PACKAGING, Nov., 1947, p. 105). About the same size as a handkerchief box (7-in. square) and not much deeper, the new RCA Victor pocketless box

SIMPLE CONSTRUCTION of album, with small-sized records, has cut cost in half. Cover paper forms hinge and box-type construction makes it dustproof.

ACETATE SLEEVE dresses up album and protects it against accidental opening. Dealers like easy stacking and space-saving qualities of 7-in. box album.



album at last offers both consumers and dealers a dustproof container easy to stack, either flat or on edge.

The album is made of newslined chipboard with the lid hinged to the bottom on the left side so it opens like the conventional book-type album. Both lid and base are paper covered; the base is covered with 60-lb. black kraft with a semi-waterproof coating, embossed with book cloth design. The lid cover stock is a linen-finished paper which is printed with colorful illustrations expressive of the mood or theme of the music. In order to supply all RCA Victor dealers with a sufficient number of albums while the new small records are being introduced, some of the boxes are also covered with 70-lb. varnished papers, but this is only to meet the initial demand. During the introductory "kick-off" period the box albums are given added display sparkle by a cellulose acetate sleeve which is slipped over them.

Packaging record sets in albums has always been the most expensive part of RCA Victor's packaging. With the conventional large records (10- and 12-in. diameter) the album package is said to make up approximately $1 of the cost and even though the album is definitely not an expendable package, as George W. Longacre, RCA Victor record packaging engineer, pointed out, the customer sometimes complains about the album retail prices as compared with loose records. The conventional record album package is expensive because of the labor involved in assembling the collated records into the separate pockets, plus the fact that the stiff covers and the backbone binding holding the pockets are costly. Eliminating the pockets and switching to smaller box albums reduces cost to about 50 cents per package.

The new small records individually are placed in gray kraft paper sleeves of conventional design, collated and placed loose in the box album which will hold up to six records. When printed copy giving information about the records is called for, $6^{7}/_{8}$-in. square sheets are placed on top of the records before the box is finally closed.

For two-record sets, the album package has been abandoned entirely and replaced by an inexpensive, colorfully printed paper envelope. This envelope is at present inserted in a transparent cellophane envelope and the flap sealed. Later, it is understood, the cellophane envelope probably will be omitted. During the introductory period also, some single records are being packaged in clear cellophane open-top envelopes without sleeves, to show off their colors, but these, too, will be replaced by the more durable kraft paper or glassine sleeves.

Contributing significantly to the reduction in packaging costs are changes in the design and construction of RCA Victor's shipping packages. The degree of pro-

tection required in the shipping packages for the new records is obviously far less than is needed for the older shellac records. The difference in weight alone allows more extensive use of paperboard containers rather than heavy corrugated shipping cartons or wooden cases.

As mentioned before, most of the new packages are such that they fall well within the weight and size requirements for fourth class mailed matter. A new square, folding, mailing carton is made of gray tinted manila-lined board (0.040). Attractively printed in red and black, this sturdy carton is constructed with mailer flaps on each end that give the package the necessary rigidity. The front panel has the famous "His Master's Voice" trademark illustration printed in red above the copy identifying the contents and in the lower half are guide lines indicating the space where address labels can be glued. Ends are printed black with the company name in red, the top end being designated as the opening end. The color scheme is reversed on the sides, with red as the background color and the name in black. Trademark on bottom panel is printed in black against a red square.

This mailing carton is the standard package in which the records are shipped from Indianapolis to distributors. The cartons may be re-used by the distributors for mailing to dealers who are also supplied with extra ones for their own use. While the cartons are always $7\frac{1}{2}$ in. square, they are made in five depths: $\frac{3}{4}$, $1\frac{7}{16}$, $2\frac{1}{8}$, $2\frac{9}{16}$ and $3\frac{1}{2}$ in. The deepest size is suitable for packaging five albums, while the $2\frac{9}{16}$-in. size is used as the standard shipping cartons for 25 loose records or 10 two-record packages. Shallow cartons are used for one, two or three albums, or loose records. Loose records in mailing cartons have corrugated pads and liners to assure a tight fit.

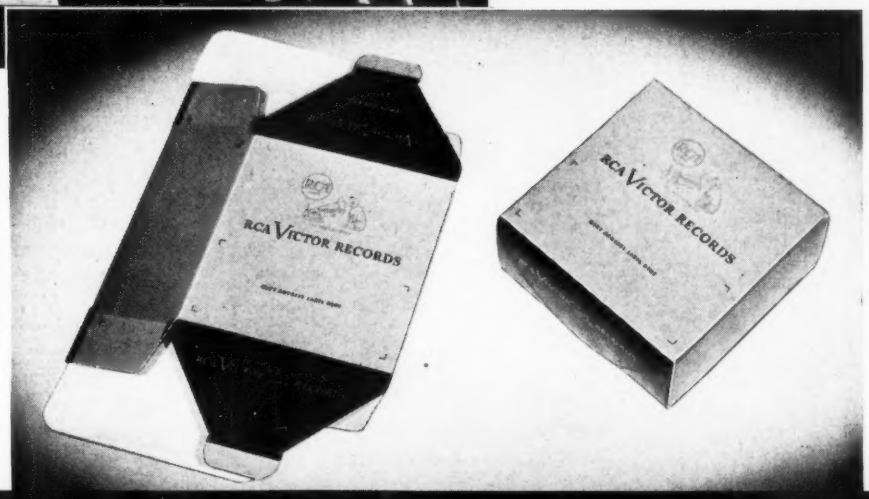
For dealer or distributor shipping of one to five records—including two-record sets—a $7\frac{3}{4}$-in. square mailing envelope of kraft (65-lb. stock) has been designed which can be used rather than a mailing carton. The enveloped records are placed between two corrugated pads and then slipped into the kraft envelope which is sealed with gummed kraft tape. The front of the mailing envelope has guide marks for positioning the mailing labels. All dealers can be supplied with these through their distributors.

When quantities run as high as 100 single records, 50 two-record sets or a dozen box albums, corrugated shipping containers are used.

The cost of shipping the new records, particularly when they are sent via parcel post, is drastically reduced, since record for record, or album for album, the new disks are $\frac{1}{10}$ the weight of the conventional shellac records. It is not even necessary to mark the shipping packages "fragile" or "handle with care," although the company recommends that "do not crush" and "keep away from heat" be added.

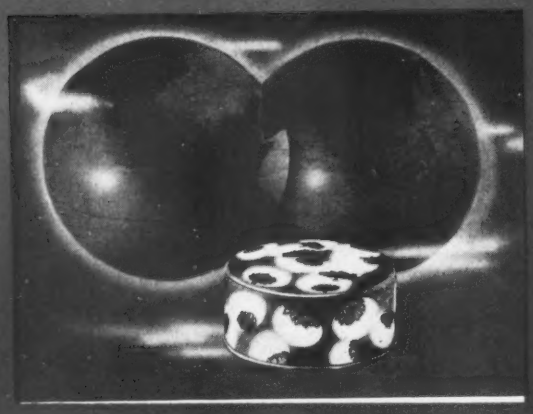
CREDITS: *Box album, Imperial Paper Box Corp., Brooklyn, and Jesse Jones Box Corp., Philadelphia. Cover paper and two-record envelopes, Alpha Lithographers, Camden, N. J.; Polygraphic Co. of America, Philadelphia; Harrison Art Advertising, Philadelphia, and Gordon Press, Inc., New York. Acetate sleeves, Imperial Paper Box Corp., using Monsanto "Vuepak" and Celanese "Lumarith." Cellophane envelopes and sleeves, kraft sleeves and mailing envelopes, P. L. Andrews Co., New York. Mailing carton, Robert Gair Co., Inc., New York.*

PACKAGING OPERATION at RCA Victor's Indianapolis plant is highly systematized and mechanized so far as possible. Mailer-type shipping cartons move by conveyor to shipping room.



SPACE SAVING at plant is substantial, not only because of records' small size, but due also to such innovations as the folding mailer carton, which is adequate for unbreakable plastic disks.

SIXTH OF A SERIES



On this month's cover . . .

Coty

L'ORIGAN

NOMINATED FOR PACKAGING'S HALL OF FAME BECAUSE:

- It dramatizes the use of a single distinctive package design motif to build a world-famous name
- It brought new conceptions in fine perfumery products to the average woman at a price she could pay
- It established a symbol for quality associated with a whole line of products sold under the same maker's name
- Its artistic individuality has stood the test of 36 years without a major change

FAMOUS LALIQUE DESIGN with its powder-puff motif printed and embossed in bronze-gold, black and orange says "Coty" around the world. Nearly a billion packages of Coty face powder have been sold in this box, first introduced 36 years ago.

Paris, New York, Rio, Buenos Aires, Istanbul, Hong Kong—wherever you go, one of the most famous cosmetic packages in all the world is the L'Origan face-powder box of Coty.

To women everywhere this distinctive round box with its bronze gold, black and orange embossed cover paper, printed with its motif of powder puffs, designed by a master—the famous glassmaker, Louis L. Lalique—is identified with the quality face powders of Coty.

For 36 years its striking individuality has been the envy of the now $680,000,000 cosmetic industry in the United States. Throughout the world countless attempts have been made to imitate the famous box which originated in Paris just before World War I. The powder-puff box has every element for quick and memorable recognizability that every cosmetic packager searches for when planning package surface design. It is as modern and beautiful today as when it was introduced—proving once again the priceless value of the master's touch in creating a design that lives forever.

The Coty L'Origan face-powder box has been selected as the sixth of MODERN PACKAGING's nominations for packaging's all-time Hall of Fame because it has demonstrated perhaps better than any other cosmetic product how a package design—on the merits of appearance alone—can bring renown for quality and a new conception of a fine perfumery product to the average woman at a price she can afford to pay.

Coty claims first place throughout the world in quality face-powder sales and estimates that nearly a billion packages of Coty powders have been sold in the orange, white, black and gold powder-puff box, with current world-wide sales of L'Origan running about 25,000,000 boxes a year.

The powder-puff box is by no means the oldest of trademarked face-powder boxes. Several French manufacturers presented their face powders in trademarked packages as early as the first part of the 19th century—Pinaud, Pivert, Bourgeois (Java Rice) Roger & Gallet,

ACETATE JACKET, introduced in 1937, is the only major change in the powder-puff decor since it was created in 1913. Coty claims to be the first to have used this box finish on a face-powder box, now adopted by many other firms. All informative data are carried on the bottom of the box, so the beauty of the design is unmarred.

Lubin—but Coty lays claim to being the first to glamourize face-powder presentations for the average woman and to associate the fineness of content with that of the package.

The beginning

The firm of Coty was founded by François Coty, who successfully introduced his first perfume creations in Paris in 1905. Shortly thereafter Mr. Coty decided to market a face powder which would be scented with the same perfumes. He presented these face powders in hand-made square boxes of leather, especially designed and selected for this purpose. A leather specialist was employed to select only the very finest leathers. These packages, like jewel cases, made a presentation of the utmost luxury, in keeping with the fine Coty perfumes then put in hand-cut glass bottles. This original face powder retailed at today's equivalent of $9 or $10 a box. Only a few could afford it.

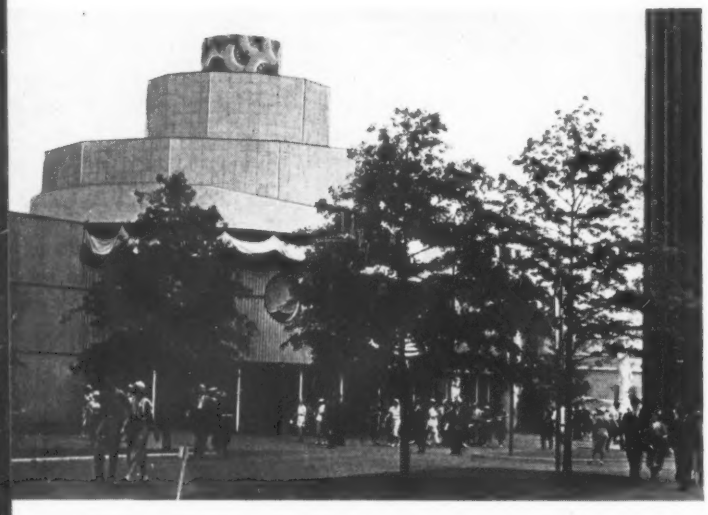
Shortly before World War I, with all industry expanding into wider markets, Mr. Coty envisioned the possibilities of wider distribution if his luxury face powder could be made available to the average woman, who could not afford the high price of the leather packages. His first packaging solution for these more popular-priced units was a square, paperboard, hinge-lidded box, not unlike square powder boxes still used by several cosmetic firms. But this packaging did not satisfy him. He realized quickly that success must depend on quick recognition of a thoroughly feminine, quality package.

He took his problem to Lalique, who had made the early Coty perfume flacons still used as reference in the perfume world. In addition to being one of the most

VARIATIONS of the powder-puff theme (left to right): First 35-gram box presented in the United States; flatter box of similar content which sometimes has been used in combination packages such as beauty kits; a 70-gram American box which was introduced during the '30s; the French counterpart of the same period; a recently modified box to show complete illustrations of the powder puffs on all surfaces; a French box of the late '20s—a large size for dusting powder.

VANITIES AND SAMPLERS have often been presented with powder-puff decor. Left to right: dry-rouge case made in 1931; large dry rouge, 1933, featuring first Air-Spun dry rouge manufactured; two paperboard boxes for sampling new Air-Spun face powder early in '30s; pressed-powder vanity made for first time in France, 1924; French dry-rouge case, 1927; present American pressed-powder vanity; manufacturer's sample of L'Origan "Loosprest" powder soon to be introduced.

RESERVED FOR L'ORIGAN, the powder-puff box is today used for only one brand of powder. Coty introduced differentiating designs for its other three famous scents—Paris, Emeraude and L'-Aimant—in 1937. Striking identity of original design still stands out in marked contrast.



WORLD'S FAIR, 1939. A familiar sight to every visitor was the giant replica of the powder-puff box on top of the Coty exhibit building —one of the most dramatic and spectacular promotional tie-ins with a famous package.

famous glass and crystal craftsman of all time, Lalique was also an expert in the design of bronze-plate carvings—and a goldsmith.

Coty specified that he wanted a décor which would be as different from existing types of face-powder boxes as were the Coty flacons when his first perfume, "La Rose Jacqueminot," was introduced in 1905. He added, "I also want this design to be very feminine, to show the close relationship to the product it will contain."

Lalique embarked on a number of design themes. Among these was a drawing displaying a powder puff as the principal motif. Quickly this pleased Coty and he commissioned Lalique to refine and develop this theme.

At the same time Coty met Georges Draeger, the best known engraver of the period, and called upon him to study the problem of reproduction. Together, Lalique and Draeger submitted the final design to Coty in 1913 —an over-all motif of white powder puffs with gold and black handles set off against a gold brush-stroked background of orange. The only trade name identification on the top of the box was a tiny lettering of the name, "Coty," no bigger than 6-pt. type, on one side of the box cover. All other descriptive matter was relegated to the bottom of the box, thus not marring in any way the beauty of this thoroughly feminine French package.

Coty face powders went on the market at a popular price in the powder-puff box in the same year. Its initial success and sustained acceptance over 36 years is striking disproof of a current theory in some cosmetic quarters that to be successful a cosmetic package must be pink or blue. Buyers in Paris from all over the globe saw the package, realized its vast merchandising possibilities and ordered it for every highway and byway of the world. In the United States, Coty products were first distributed through Benjamin E. Levy, Coty's exclusive agent—so successfully that when Coty, Inc., the United States company, was formed in 1922, Mr. Levy became its first president.

Advertising

The recognition value of the Coty "powder-puff" package can be more fully appreciated when it is known that by 1919 Coty business in the United States had reached an invoicing of $1,000,000 without a cent of advertising. The first advertising budget of $50,000 for Coty products in the United States was made in 1919, the first year after World War I. Since then, Coty has been a consistent advertiser. Current advertising expenditures for all Coty products (perfumes, powders, toilet waters, treatment lines, etc., about 360 items, plus special Christmas presentations) now total more than a million dollars a year for direct and cooperative newspaper space, space in fashion, women's and trade magazines, weeklies, point of sale, promotion and publicity.

The first boxes with the powder-puff design contained about one-half as much powder as they do today—roughly about 35 grams—retailing at $2.50 in comparison with 65 grams retailing today at the fair-trade price of $1.

Package evolution

Except for the size of the box, stabilized during the '30s and slightly enlarged in diameter this year so that the powder-puff motifs are complete on all surfaces of the box and do not extend over the top edges as they formerly did, there has been no change in the powder-puff design in the 36 years of its existence.

The only outstanding change in the package has been the use of a transparent acetate jacket over the cover. Coty claims to have been the first to use this finish on a

face-powder box, having introduced it early in 1937. Since then, many other cosmetic firms have followed Coty's lead.

In the beginning, all four famous Coty powders—L'Origan, Paris, Emeraude and L'Aimant—were packaged in the powder-puff box and all Coty products sold in the United States were manufactured and packaged in France. Passage of the Smoot-Hawley Act, which practically doubled tariffs on finished perfumery goods imported to the United States, made necessary the formation of Coty, Inc., an American company independent of Coty International Corp., and the establishment of facilities for production and packaging in the United States.

The box with the powder-puff motif, however, was continued as the package for all Coty powders until 1937. Throughout its history, the powder-puff design has also been used in presentations of related items such as a flatter type box of similar content for beauty kits, a large-sized box for dusting powder, vanities for dry rouge, pressed powder, "Loosprest" powder and sampler packages for the first Air-Spun rouge and Air-Spun powder.

At the New York World's Fair in 1939 it was the identification theme of the Coty exhibit, reproduced in giant replica as a tower on the Coty building.

About 1937 the company felt that the four leading Coty powders should have differentiating packages. Thus, new powder-box designs were introduced for Paris, Emeraude and L'Aimant. The powder-puff box was reserved exclusively for L'Origan, which always has been the leading brand of Coty powder and accounts for approximately 30% of all Coty face-powder sales.

Package manufacture

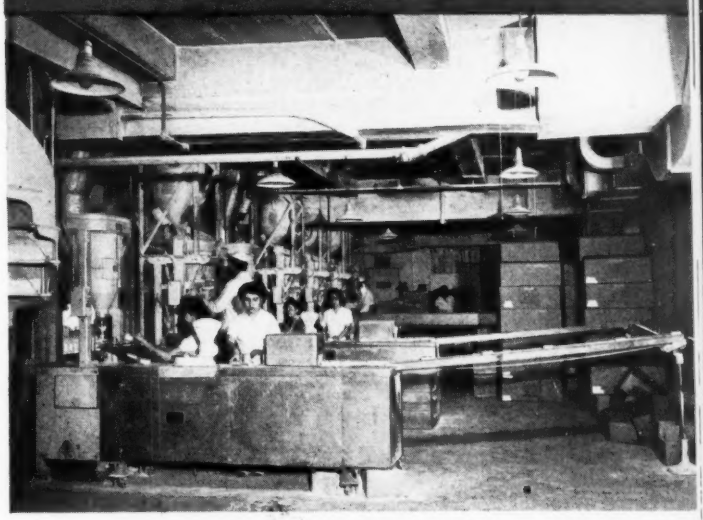
Today all L'Origan packages for sale in the United States are manufactured in this country. Cover paper and boxes are made by American firms. Coty's plant in Paris produces most of the Coty products and packages for European markets. For other parts of the world, manufacturing and packaging is done in accordance with local requirements. In some countries Coty buys packaging supplies and manufactures locally. To others, Coty exports finished packages of American or French manufacture. In certain instances only the cover papers are exported, with the rest of the packaging produced in the country where it is to be sold.

Quality control

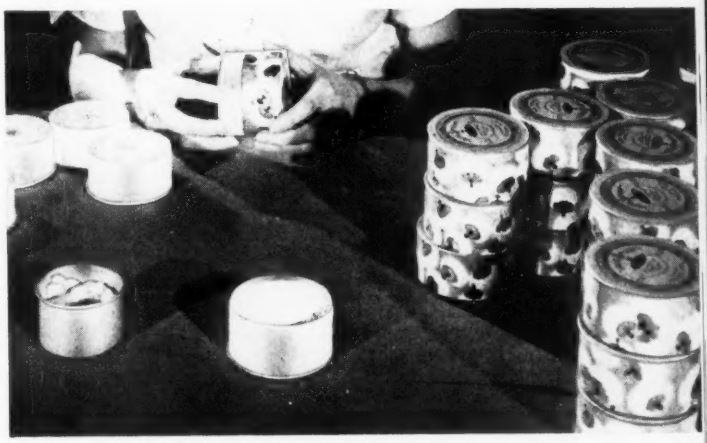
Over all this production and packaging, Coty, Inc., and Coty International keep an eagle eye. From the beginning there has never been a compromise with quality. Every product and every package must measure up to the most rigid specifications and ideals of perfection established by François Coty, the company's founder.

In New York, Coty, Inc.'s management is renowned in the packaging-supply trade for demanding and accepting nothing but the best. The staff of the Paris plant is reputed to be (*Continued on page 188*)

Filling L'Origan boxes



AUTOMATIC MACHINES receive powder from floor above and fill cellophaned drums. To assure accurate fill in accordance with labelled quantity on box, careful checks are made on sensitive scale in foreground. The previously labelled bottom of box is wedged on drum. Wedging consists of placing drum and base through a set of double rollers. The filled and sealed drums are then moved by conveyor belt to the next room.



FINISH IS CHECKED when boxes arrive on belt; then girls put on proper box covers by hand.

LABELLED CARTONS are then packed to hold either six, 12 or 144 boxes of the face powder.

UPLIFTING

COORDINATING brand names with package design relates product groups. The Lyncrest (paper products) facial-tissue packages have the same design as the Charm-Aid hair-net envelopes; the paper-napkin wrap design is a modification of the Wearite (household group) package design.

"GRANTAGS" feature informative copy giving shopper the differences in quality of merchandise, particularly on clothing and household items. Color of new laboratory seal on label also designates quality. Three colors for labels builds three-quality recognition.

INFORMATIVE COPY for Wearite ironing-board-cover cartons answers questions both customer and sales person want to know when prices and sizes of packages are compared.

THE PRIVATE BRAND

W. T. GRANT'S COORDINATED PROGRAM BEGAN WITH SPECIFIC OBJECTIVES AND HAS ACHIEVED SOME IMPRESSIVE RESULTS

Large department stores, chain stores, buying groups and mail order houses, through their enormous purchasing power, have been able to build merchandise to their own specifications, to sell under their own brand names, usually at very attractive prices. The packaging and labeling of such merchandise is of the utmost importance, for it must identify the merchandise, tell its story of value and compete favorably for attention and prestige with other established merchandise already on the shelves. It is essential that the organization follow a well-defined, well-coordinated program for packaging and labeling its private brands.

An outstanding private-brand packaging program has been put into operation during the past few years by the W. T. Grant Co., New York, for Grant brand merchandise sold in the company's 490 stores throughout the country. It involves not only package and label redesign, but informative labeling, grouping of products into brand-name "families" and the packaging of many items formerly handled in bulk. It is particularly noteworthy, because coordinated packaging is not often found at this retail level.

Before the program started functioning, the company made a survey of all the merchandise sold under the Grant name and from this preliminary survey four packaging objectives were formulated. Goal of the packaging program would be: (1) to identify Grant brand merchandise, (2) to dramatize quality, (3) to capitalize on the opportunity for "counter advertising" and (4) to coordinate the use of Grant brand names.

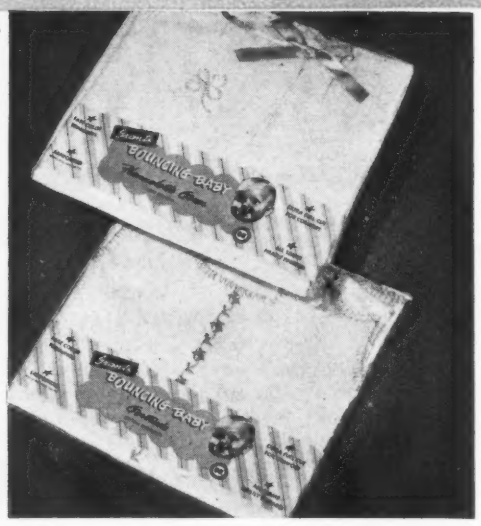
To achieve the first two objectives—identifying Grant brand merchandise and dramatizing quality—it was decided to standardize the design layout of labels in order to build recognition value for such merchandise and to provide ample space for selling facts and information. The redesigned labels employ a color-quality designation to dramatize the company's famous three-quality merchandise story. Named "Grantags," these labels have the distinguishing quality-color highlight in two spots: as a color band printed under the brand name and as the background color for the new laboratory seal of approval in the bottom border. Red is used to indicate Grant's "Superior Value" (medium priced) merchandise which, according to the company, is that classification giving the customer maximum utility for her money; it represents the greatest volume in each of the lines. For its "Economy Quality"—items in which some concessions have been made in basic material, workmanship or design in order to achieve lowest price—the company selected apple green as the color-quality key. For merchandise having all the utility features of Superior Value merchandise plus the addition of extra features for greater pride of ownership which the company calls "Supreme Quality"—highest priced of the three lines—the identifying color is blue.

Adoption of these color-quality Grantags with the new laboratory-tested seal of approval as an institutional service for its customers, gives the company a valuable promotional asset. For its own sales staff, the Grantags are equally significant as a selling aid.

Informative labeling-copy principles are used "to capitalize on the 'counter selling' opportunity." Behind this third objective in the packaging program is the company's two-fold aim of making merchandise move faster by helping their customers buy better and helping their sales people sell better. Via the Grantags, both customers and salespeople are told about the goods so they can ascertain easily the difference between the

"WTG" STANDS FOR W. T. Grant, as well as for Wear-Tested-Guaranteed, and is a time-proven trademark in the work-clothes line, a mainstay of Grant's business. All of the work clothes are sold under this name now, whereas formerly there were 12 different designations.

FIRST PRIZE was given to this sweater, blouse and shirt line in a company contest, judged as the line showing most improvement in packaging during 1948. Judges like the use of the printed cellophane, open-top bags which, they said, "encourage self-selection" by the shopper.



DRAMATIZATION of quality by transparent packaging and continuity of design for "Bouncing Baby" line made it the second choice of judges in company contest.

three qualities. Each label answers these questions:

1. *What is it?* Name or identification of item.
2. *What is it made of?* Kinds and quality of fibre, metal, wood, etc.; in the case of fabrics the copy is quite specific so that the customer can differentiate.
3. *What will it do?* Degree of color permanence, shrinkage, stretchage, seam slippage, resistance to water, perspiration, wind, wear, etc.
4. *How is it made?* Size, weight, thread count per inch, finish, ply, cut, etc., in as much detail as will be helpful to the customer.
5. *How do I care for it?* Detailed instructions for washing or cleaning, precautions to be observed in cleaning and other hints which will help customers get the most service from the item.

The company's belief is that if customers are told the facts about the merchandise they will generally trade up to better quality because they want top value for their money. A point which the survey made exceptionally clear was that Grant had too many private-brand names—over 160 different ones. This is the reason for the fourth objective, "coordinate Grant brand names." Through the packaging program the company plans to build acceptance for its private-brand names by concentrating the promotion impact and to do this it is necessary (a) to simplify the naming structure, (b) to extend effective, established names to related items, (c) to coordinate the use of names between departments and (d) to coordinate the quality implication of all Grant names. This part of the program called for the most careful planning of package design. After selecting approximately 18 of the most successful brand names out of the 160, each name was assigned to a particular type of product; e.g., paper, lingerie, rubber goods, baby items, household goods. Thus divided into "family" groups, packages were designed which generally emphasize visibility by using windows or complete transparency.

Color, art-work design and type faces are used adroitly to relate items both within their own families and within the departments where they would be found. For instance, Lyncrest is the family brand name for Grant's paper products; but since paper products are found in the cosmetic and toiletries department as well as the household departments, two different art-work designs have been made (although the name is always retained in its script logotype). Thus, Lyncrest facial tissues, sold at the cosmetic counter, are packaged in boxes printed with an all-over design of small flowers on a pale blue background. These boxes harmonize with the Charm-Aid brand (cosmetic grooming-aid items) hair nets, since the Charm-Aid name is printed in the same script type face and the floweret design pattern has been carried over to this other family group. A refinement of the over-all packaging plan is found in the hair-net envelope color scheme: pastel pink, blue and green shades as the background colors distinguish the three types of hair-net materials.

In a similar manner, paper napkins as part of the Lyncrest line are packaged with a design adapted from the one made for Grant's Wearite brand of household kitchen items. The Lyncrest script is the same and the Wearite striped-and-plain background design has been used on the napkin package.

The illustration of Wearite ironing-board-cover cartons shows how the informative labeling aspect of packaging has been treated as an integral part of the package design, placing the approval seal where the eye focuses at the junction of the design elements, identifying the quality by the box color (plus the quality designation

QUALITY LOOK, graphic presentation of product information on insert of bottle package in Everyday rubber-goods line achieved third place for this line. Note carded hose and glove bag.

under the Wearite name) and adding the Grantag logotype in the lower left corner.

One of the places where the company simplified its naming structure to a great extent was in the elimination of many brands of wearing appearel. Whereas men's work clothes were sold under 12 different names previously, now only Grant's "WTG"—initials of the slogan "Wear-Tested-Guaranteed" as well as of the company—appears on overalls, work slacks, shirts, etc. Copy printed on paper stickers, tents and bands for these items answers the five questions of informative labeling.

Recently the company held an exhibit of all the merchandise which had been repackaged under the program during 1948. A three-man panel of judges, chosen from outside the company, selected the three lines which showed the best packaging or labeling achievement during the year.

Capturing first place was the packaging for Grant's three brands of blouses, shirts and sweaters, "Joyce Lane," "A Heavenly Shirt" and "Blouse of the Stars," all of them packaged in printed cellophane, open-top envelopes. This complete line was considered outstanding by the judges because the cellophane envelopes gave "adequate protection for the merchandise, yet were convenient to examine" and "the attractive bag design allows maximum visibility for the colorful merchandise." As compared with Grant's competitors, the line's packaging "pioneers the 'self-selection' factor in this line of merchandise" and, finally, at this retailing level "the packaging represents a 'plus'—you *expect* such additions in the specialty shop and department store, as part of the extra price you pay."

Grant's "Bouncing Baby" infantwear packaging took second place. It, like the blouse, shirt and sweater line employs "see-through" packaging as much as possible. Diapers, crib pads and garments are wrapped in cellophane with paper labels featuring the Grant Baby illustration and the seal of approval. The judges liked the continuity of the design, the informative selling copy on the packages and the color (pink and blue) and charm added by the packaging to otherwise staple merchandise.

Third place was given to the packaging for the "Everyday" rubber-goods line. Again the "see-through" element was a decisive factor, but in addition, the judges approved of the way in which the die-cut paperboard cellophane window insert on the combination rubber bottle and syringe item was designed. The information and illustrations printed in reverse along the bottom of the insert provided an effective way of visualizing the features of the product for self-service selling. It was felt that the general hygienic feeling of the box design and color (two shades of blue) was good. Comments were made particularly on the carding of the rubber hose—usually a bulk item—and the innovation of packaging rubber gloves in printed, heat-sealed cellophane bags. "Everyday" brand packages "add a 'first line' quality" for the line, said the judges.

Naturally, part of the success of Grant's packaging and labeling program depends upon the merchandise buyer. He works with the marketing department in carrying out the packaging plan for his line, first evaluating the line as to what it includes, dividing the line into the three qualities, deciding on the brand-name program when there is to be one and arranging with the manufacturer for the paying of label and packaging costs. When the buyer and the marketing department have this information assembled and approved by the group merchandising manager and the merchandise and sales promotion managers, the next steps are taken. The factual copy, based on laboratory tests and manufacturer's information, is prepared by the buyer and the marketing department.

Sales results of the lines packaged under the program have convinced most of the buyers it is to their benefit to work out the packaging for their merchandise, it is understood. Some of the lines which moved slowly prior to being packaged or repackaged have become leaders in their departments. One of the greatest savings has been in the reduction in mark-downs since merchandise—notably the blouse, sweater and shirt line—is protected from the handling that quickly gave it a shopworn appearance. Not only have shoppers proved more receptive to the merchandise when packaged, but the sales personnel have found the packaged lines easier to take care of, easier to display and easier to sell.

CREDITS: *Wearite ironing-board-cover boxes, Service Carton Co., Brooklyn. Charm-Aid hair-net envelopes, U. S. Printing & Lithograph Co., Cincinnati, Ohio. Joyce Lane and other blouse, shirt and sweater cellophane combination bags, Ceilu-Craft Products Corp., Flushing, N. Y. "W.T.C." tags and labels, Robinson Tag & Label Co., New York. Bouncing Baby flannelette line labels, Lieberman's Printery, Wilkes-Barre, Pa.*

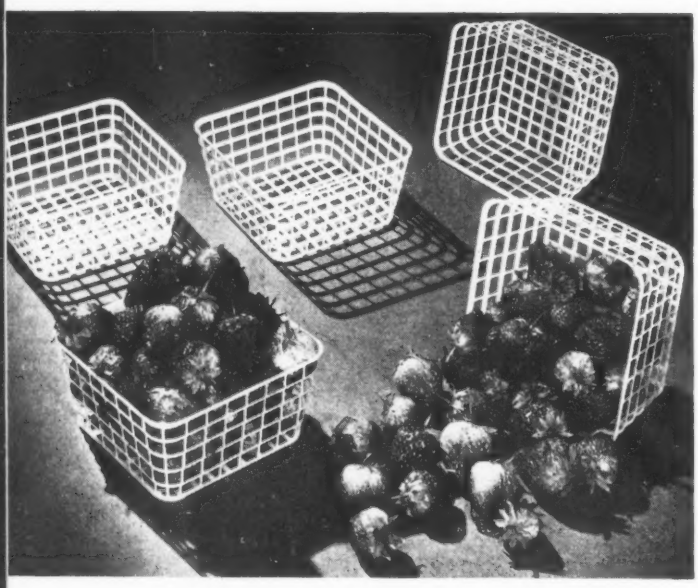
MP DESIGN

Dressed for over-the-counter

A complete repackaging program has just gotten under way at the Parker Herbex Corp., Stamford, Conn., manufacturers of hair and scalp remedies since 1880. Until recently their products consisted of those procurable only on prescription for professional use. Now the company is entering the over-the-drug counter field and their packages are being planned from a consumer-appeal approach. First item to reach the retail market is this new $^1/_2$-oz. size collapsible metal tube for Herbex Hair and Scalp Ointment, smartly designed with a circular spot in red against a blue background. Individual paperboard cartons are similarly designed. According to the company, the light weight of the new container saves almost 50% in shipping costs over previous packaging, enabling wider distribution at a nominal price. Consumers like the convenience of the tube.

CREDITS: *Collapsible tube and cap, The Sheffield Tube Corp., New London, Conn. Carton, National Folding Box Co., Inc., New Haven, Conn.*

Polystyrene strawberry baskets



Something truly new are the multicolored plastic berry baskets which The Charles Abbate Co., Hammond, La., used this season for its strawberries. Holding a pint of strawberries and weighing less than half an ounce, the injection-molded polystyrene boxes fit conventional 12 and 24 strawberry flats. Perforated sides and bottom of the basket permit the air to circulate around the fruit, enabling them to be chilled more quickly. Cost of the plastic boxes is approximately double that of veneer boxes, but the added sales appeal makes the extra cost worth while, according to the company. From the dealer's standpoint, perforated boxes tend to discourage damage to berries by customers, since the berries are visible from all sides. Eye-catching store displays have suggested to shoppers ways of reusing the baskets as candy or cookie containers.

CREDITS: *Boxes, "Fresher-Pak," molded by Allied Plastics Co., Los Angeles, using Dow Chemical Co. "Styrene" polystyrene.*

HISTORIES

Baby's beauty kit

Johnson & Johnson's new de luxe gift package is a real beauty kit for a baby, containing oil, lotion, powder, soap, cream and cotton tips. Its color appeal, clean-looking appearance and practical construction are the result of a recent redesign program for the packaging of the company's entire baby products line. The box-cover paper is an acetate lamination which resists staining and dust and heightens the eye appeal of the box. Individual cartons for separate items are also laminated with acetate. When the ribbon-hinged lid is opened, an appealing picture of a baby is found attached to the inside in such a manner that it can later be removed for framing. The base has a die-cut, paper-covered platform to hold the various items, plus paperboard interior supports for the products, fitted in beneath the platform.

CREDITS: *Design, Marsh Studios, New York. Box, Jesse Jones Box Corp., Philadelphia. Printing, Heidingsfeld Printing Corp., Milltown, N. J. Cellulose acetate lamination (Lamcote), Arvey Corp., Chicago. Liner paper, Bradner Smith & Co., Chicago.*

Single-unit meat carton

A new single-unit meat package requiring no separate liner or overwrap has been adopted by Geo. A. Hormel & Co., Austin, Minn., for its frankfurters, pork sausage links and sliced dried beef. The supplier has applied for patents on the design of the shallow carton, which has rigid walls and a lock arrangement on two of the bottom flaps. Printed in two colors, the folding window carton is made of heavily waxed solid white paperboard with attached liner of greaseproof transparent film. The same type of package may also be made without windows and with either transparent or opaque liners, depending on product requirements. Carton blanks are quickly and easily filled and folded by hand. It is reported that one operator can do more than 100 packages an hour. Shape of the carton fits conveniently in both display cases and home refrigerators.

CREDIT: *Carton, "Wallet-Pak," developed and supplied by Marathon Corp., Menasha, Wis.*

MP DESIGN

Doctor's emergency case de luxe

The use of a familiar luxury package form for an unusual ethical promotion job is represented by Eli Lilly & Co.'s emergency case now being presented to 80,000 physicians. The convenient-to-carry kit provides an assortment of drugs to cope with almost any emergency and is presented gratis by the company. The metal-framed, spring-hinged case, $6^{3}/_{4}$ by $3^{5}/_{8}$ by 1 in., is covered with a leather-like fabric and lined with water-marked taffeta. The metal-form inner tray, compartmented for each of the 10 glass-packed drugs, is covered with the leather-like fabric and permanently fixed in the case. The only identification with Lilly, aside from the labels on the individual vials, is the small type-script stamped in red on the lid lining and in gold on the outside cover. The physician is not likely to discard such a valuable and convenient case, but to keep it filled with Lilly products.

CREDIT: *Case, Farrington Mfg. Co., Jamaica Plain, Mass.*

Transparent folding carton

Beardmore Products, Inc., has introduced a new product in a new package form. Beardmore Shampoo Capsules—in individual, one-time-use quantity—are packaged in a transparent plastic folding carton. Selection of this type of container was made, according to the company, because the transparent folding cartons are easy to handle at the plant, hold up well in shipping and are convenient to use. The folding carton is printed in pink, which creates a pleasing color contrast with the six amber-colored capsules inside. A paper label inserted at one end instructs the user, "For shower use, squeeze contents of capsule directly onto hair." A dozen cartons are packed in a paperboard counter display carton. In a test campaign at Binghamton, N. Y., it is reported, consumer reaction to the new product was highly favorable.

CREDITS: *Transparent folding carton (Plastafol), Troth, Bright, & Page, Inc., Paoli, Pa. Capsules, Gelatin Products Div., R. P. Scherer Corp., Detroit. Display, F. N. Burt Co., Inc., Buffalo.*

HISTORIES

Package doubles as self-seeder and lawn sign

For its newly developed hormone-treated Earth Carpet lawn grass seed, L. Teweles Seed Co., Milwaukee, felt that an out-of-the-ordinary package would be justified. The result was this unique cellophane-laminated carton, designed and developed by the company, covered by copyright and patent registrations. The carton doubles as a self-seeder and a lawn sign.

Perforated openings at the top of one of the package side panels may be punched out to provide the handy self-seeding feature that assures even seeding and eliminates spillage common with the conventional type of seed carton. When the carton has been emptied, the printed back panel may be cut out and tacked to a stake as a sign to protect the freshly seeded lawn. One side of the green and black colored package describes the composition of the mixture and the features of its hormone treatment.

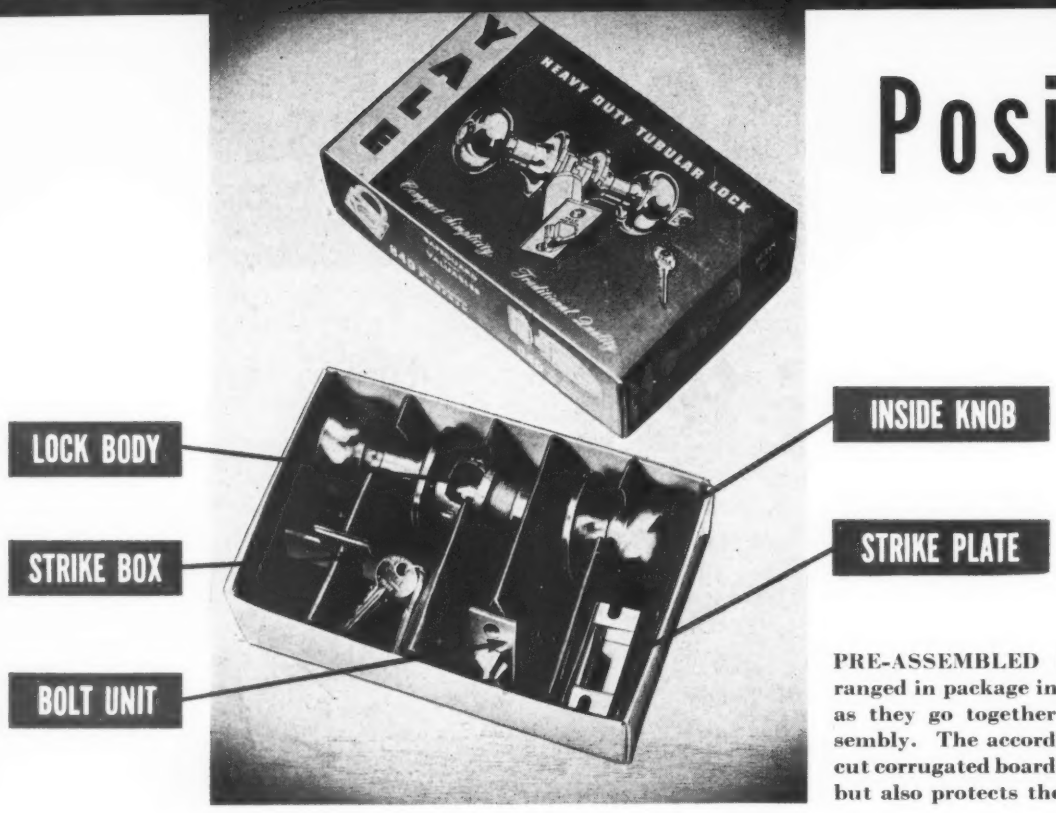
CREDIT: *Carton, Badger Carton Co., Milwaukee, Wis.*

Salad dressing "fixings"

Packaging plays a significant role in the merchandising of 4-Seasons Salad Dressing Base, a product which contains the "fixings" for home preparation of four different kinds of salad dressings. The salad dressing kit, a set-up paperboard box with metal tabs, is for sale through gift shops, department stores, etc. Appetizingly designed with a salad-bowl motif, it contains four paper envelopes with dried ingredients for each type of dressing and a mixing and measuring bottle. Applied color decoration on front of the bottle features trade name and salad-bowl motif; back indicates points to which vinegar, oil and water should be added. For sale by grocery stores, there is a single bottle containing one envelope of base mix. The display carton holds 24 refill ingredient packages.

CREDITS: *Bottle, Glass Containers, Inc., Los Angeles. Closures Container Service Co., Los Angeles. Envelopes and display carton, Milprint, Inc., Milwaukee. Set-up box, Acme Paper Box Co., San Francisco.*

Positioned



PRE-ASSEMBLED LOCK PARTS are arranged in package in left-to-right order, just as they go together in quick four-step assembly. The accordion-folded insert of die-cut corrugated board not only positions parts, but also protects them from possible shock.

Because of a package, a carpenter can now install one of Yale & Towne's new pre-assembled tubular locks in, it is claimed, 30 seconds. The company estimates that this "trick of boxing"—as it is referred to in one of their advertisements on the lock—will save thousands of dollars for builders of apartment houses, schools, hotels and office buildings where lock installation had been a costly, time-consuming operation.

While primary credit for this new speed in installation belongs to Yale & Towne engineers who designed the complicated mechanisms of the tubular lock parts so that they could be pre-assembled in the plant, the benefits of their skill could not be fully realized without the package, in which the five parts of the lock are positioned in "exploded form," in their exact relative positions, ready for a quick four-step assembly in the door.

The installer can see at a glance, when he opens the package, exactly how the parts go together. Complicated diagrammatic instructions, which formerly were required with all lock sets, are done away with. Errors and misfittings are done away with. Obviously, this is an idea that could have many other applications in packaging, wherever a product is sold in disassembled form.

The new lock can be used for either right- or left-hand doors, as the lock mechanisms are designed with both left and right attaching positions for the belt. Tubular construction eliminates all extraneous details from doors and reduces drastically the amount of mortising needed—only the recess for the front of the lock has to be mortised, using a template in the box.

It is essential that the parts of the lock go together in a certain predetermined order, so the first problem for Yale & Towne packaging experts was, "How do we explain to the user which pre-assembled part goes first—and where?" But, in addition, there was the second problem, "How do we protect the parts from jars and shocks that may jam the mechanism during normal handling in distribution?"

The answer to the second problem suggested the solution for the first. Some type of die-cut partition or platform inside the box could be designed which would hold the parts firmly. And, since the parts would be fitted in the box in some order, they could easily be arranged in *the order of their use*. Thus, the idea of the positioned package was conceived.

Since Yale & Towne's extensive package redesign program was completed several years ago, the company has standardized the type of folding box for which the two halves are shipped as flat blanks and quickly set up by hand to form an exceptionally rigid, tough, telescoping container (MODERN PACKAGING, June, 1946, p. 103). For the new tubular lock, the added inner protective packing consists of a die-cut, accordion-folded, platform insert made of light-weight corrugated board, the surface printed a dark blue shade matching the color used for the Yale name on the outside of the box. There were two reasons for adopting this type of insert: (1) the weight of the parts required heavy board and it was found after trying various types that corrugated was the most satisfactory and (2) the accordion folding serves to distribute the weight, prevents metal from rubbing against metal and supports the box against top pressure. Structural details of this die-cut insert, the box and the five parts of the lock can be studied in the accompanying photographs.

Positioning the parts in the box follows the left-to-right concept. Thus, when the carpenter installs the

packaging

YALE & TOWNE CUTS INSTALLATION TIME ON LOCK SETS

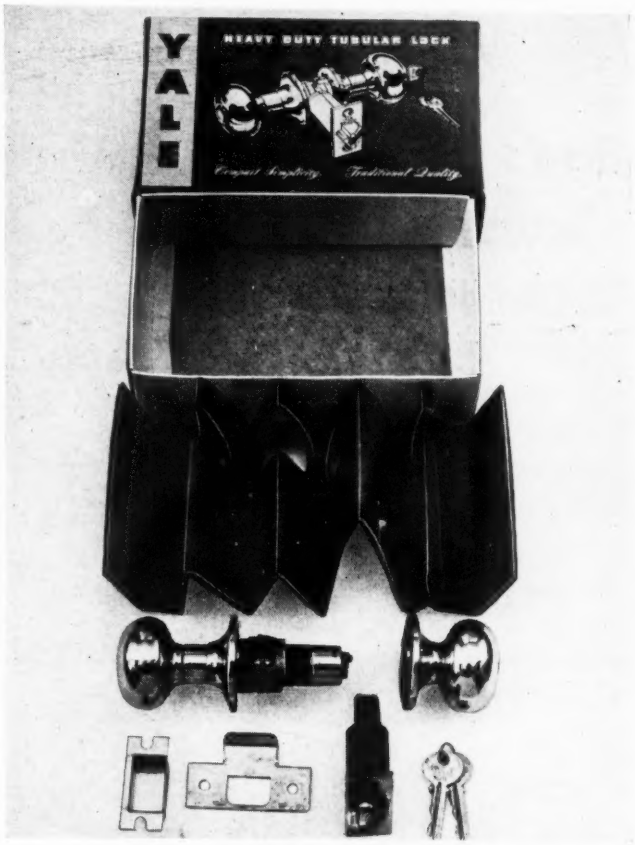
TO 30 SECONDS BY BOXING PARTS IN THE ORDER IN WHICH THEY ARE ASSEMBLED

lock, the first part he needs after boring the necessary holes in and through the stile, is the lock body which is placed in the upper left corner of the box. Next, the bolt unit—positioned in the center section of the box—is inserted and the two units interlocked by turning the knob. After tightening the inside lock nut in the lock body and the outside rose against the door, the inside knob, which is located in the upper right corner of the box, can be snapped into place. The final step is to set the strike box and strike plate (lower left and right corners of the box, respectively) in the door jam.

The new locks are manufactured in two lines, heavy duty and standard, the latter including six different models suitable for residence doors. To promote multiple-unit sales of the standard line, two sets of locks keyed alike—back and front door—are packaged in a combination package. Each lock is individually boxed in the positioned form and then these two cartons are inserted into a large carton with an end opening.

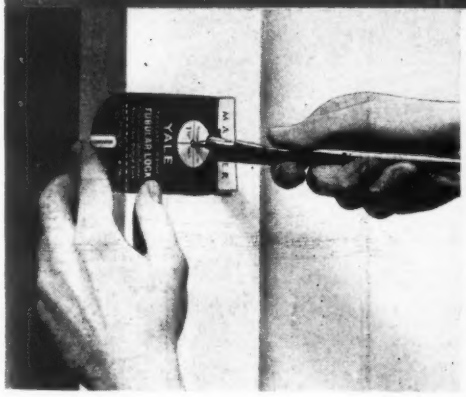
Announcements introducing the new lock in the positioned package were made recently through a series of advertisements in building-trade papers. Particular emphasis has been laid in the ads on the packaging convenience and in *Architectural Forum* the entire ad was built around an illustration of the package with the headline copy, "A trick of boxing. . . that knocks out a lock installation job in 30 seconds." Trade acceptance of the lock has been very good, the company reports.

CREDITS: *Carton and insert, Simplex Paper Box Corp., Lancaster, Pa. Labels, General Offset Label Co., Springfield, Mass.*

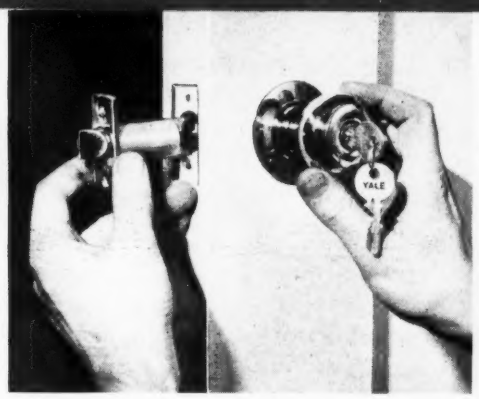


COMPONENTS of complete package show structural details. Telescope box, formed from flat blanks, provides rigidity needed for heavy locks. Platform insert is of light-weight corrugated.

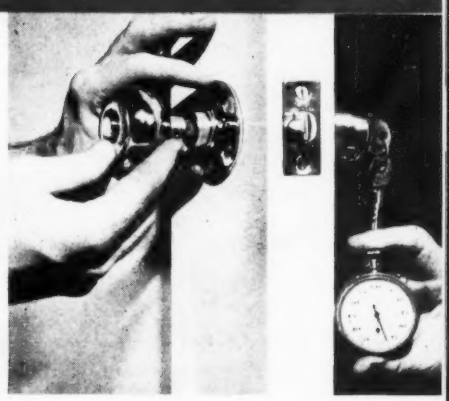
Stop watch tells the story



PAPER TEMPLATE indicating size and position of holes to be drilled in stile is included in the package with simple diagrammatic instruction sheet.



LOCK BODY and bolt unit are slipped into place and interlocked by simply turning the knob. The only mortising necessary with new lock is on door edge.



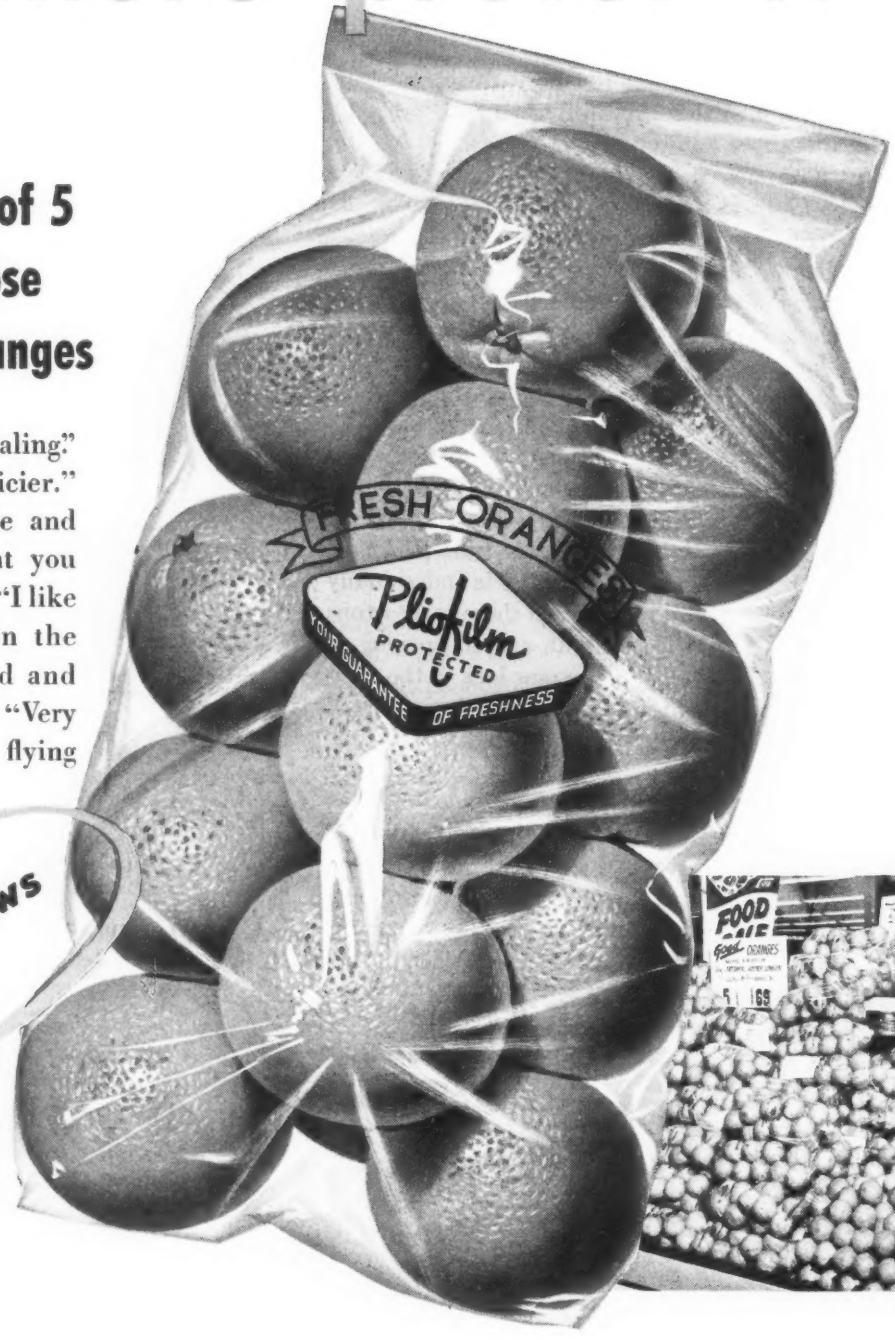
INSIDE KNOB is snapped into place after lock nut and rose are in place. Strike box and plate are added—all in 27 seconds.

Customers prefer it—

Here's why 4 out of 5 housewives choose Pliofilm bagged oranges

"They're attractive and appealing." "The oranges are fresher, juicier." "**Pliofilm** is tough, washable and clear." "You can see what you buy—keep things fresher." "I like the feeling of strength in the **Pliofilm.**" "Can be washed and used over and over again." "Very handy. Oranges don't go flying all over."

—from consumer interviews



The **Pliofilm** super-market bag has scored a super-hit with customers and dealers alike. That's because **Pliofilm** keeps fruits, vegetables, cheese, meats, all kinds of foods, fresh and tasty for days longer. It withstands rough handling in shipment.

Pliofilm produce bags and merchandise containers are available in a variety of shapes and sizes to meet your special needs. Easily heat-sealed, they present no closure problem. Let sales-building, quality-protecting **Pliofilm** end your packaging headaches. For information, write: Goodyear, Pliofilm Department, Akron 16, Ohio.

Dealers find it pays!

And here are typical sales results from super markets

In a Midwestern City:

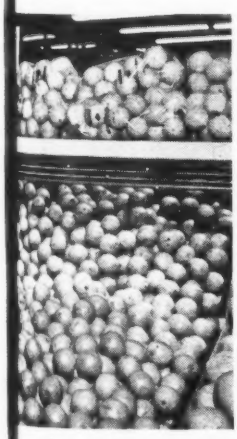
Where **Pliofilm** bags and mesh bags of oranges were displayed side by side—

The **Pliofilm** bagged oranges outsold the others by 50%

Where **Pliofilm** bagged oranges and bulk oranges were displayed side by side—

The **Pliofilm** bagged oranges outsold the others by 27%

In a Southern City:



Where 1,000,000 five-pound-size **Pliofilm** bags were used—

Pliofilm bagged items—all kinds—increased sales by a minimum of 10%

—from sales reports

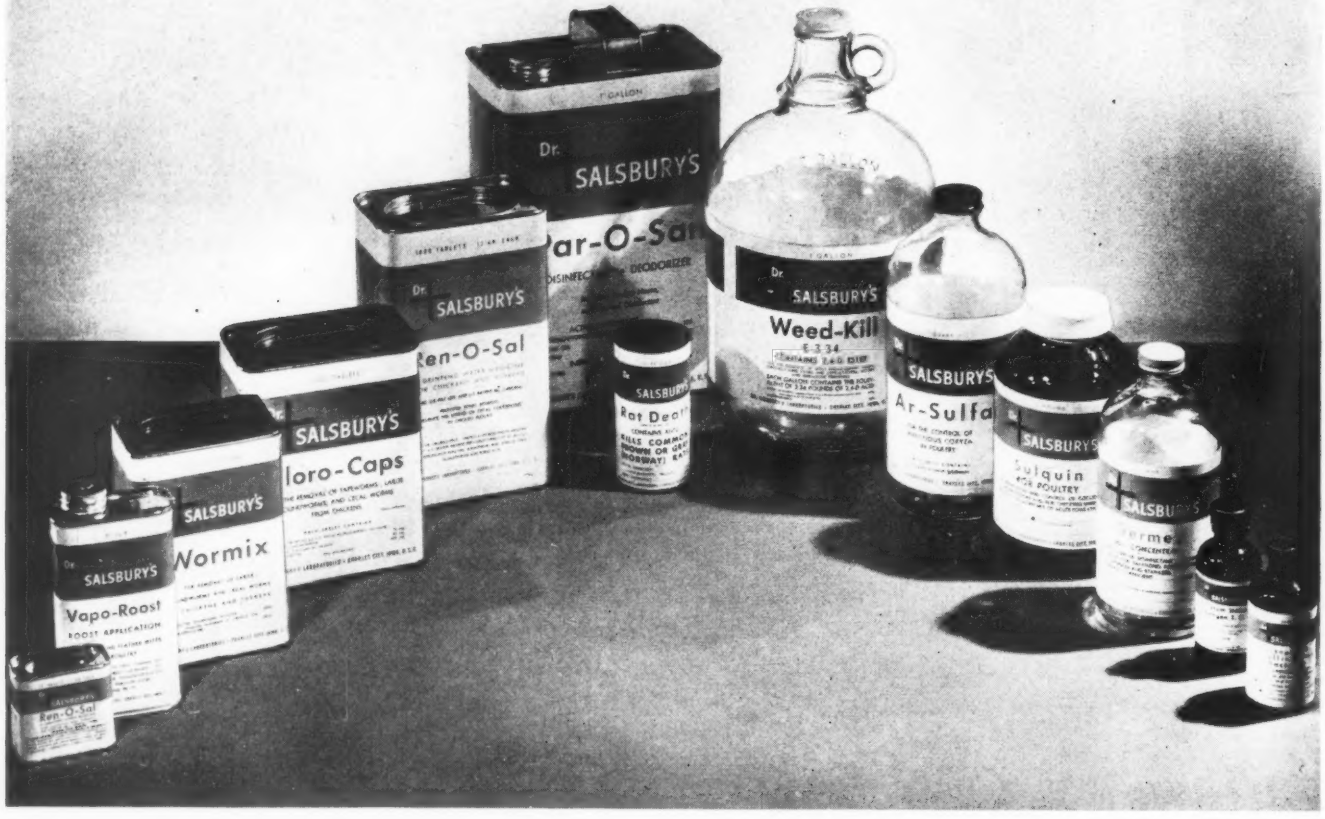
Good things are better in Pliofilm

GOODYEAR PACKAGING FILM

3-way protection against air, moisture, liquids

Pliofilm T.M. The Goodyear Tire & Rubber Company

Farm biologicals go ethical



TYPICAL GROUP of products shows how new family design treatment ties entire Dr. Salsbury's line together for immediate identity and mass sales display. Four basic colors are combined with black to define the four classes of products.

An excellent case history in package modernization for a large family of related products—that, in a word, describes the broad repackaging program now being completed by Dr. Salsbury's Laboratories, Charles City, Iowa.

This organization is a leading supplier of poultry medicines, biologics, disinfectants and insecticides and miscellaneous farm chemicals. As is the case with so many progressive firms, the company's packaging problems were largely an outgrowth of its own successful operations. Through the years, new products were added from time to time until drastic measures were necessary to bring the various packages into orderly relationship.

When the program was completed, the company had a modern, distinctive family package design which afforded new display opportunities and greatly facilitated the entire merchandising procedure. In addition, it was found possible to effect important economies by replacing three-color labels with labels printed in two colors, simplifying the production problem and at the same time paving the way for improved product identity.

Officials of the Dr. Salsbury organization had long recognized that new packaging and merchandising trends in the human drug field had resulted in more dignified design, subdued colors and a general appearance which promoted a highly professional and ethical feeling for products of this type. They felt that in their own line of products, such a packaging approach should be equally effective and distinctive.

Indicative of the importance attached to this redesign project was the fact that a packaging committee was organized to direct the program. Represented on the committee were the sales, advertising and art departments, legal department, production, technical and purchasing, with Dr. John G. Salsbury, general manager and vice president, serving as chairman.

"As is often the case," reports C. E. Teeter, assistant advertising director, "everyone had different ideas about what the package should be like, individual preferences as to colors, materials, designs, etc. While we have our own art department—one quite capable of creating good package design—we decided to employ the services of a packaging design authority rather than compromise the new package design by trying to include everyone's ideas."

Fifteen prominent package designers were contacted, several of whom appeared before the packaging committee. Meetings were arranged for general discussion of the packaging problems involved. Finally a selection of the designer to handle the job was made and the actual program got under way with this organization

PACKAGE REDESIGN UPGRADES AND INTEGRATES THE DR. SALSBURY'S LINE, WHILE EFFECTING IMPORTANT ECONOMIES IN LABEL PRODUCTION

and members of the Dr. Salsbury staff working in close cooperation. After creation and acceptance of the basic design, the Salsbury art department took over the project, working with the advice and counsel of the design organization.

Fundamentally, the problem was one of bringing order out of chaos. With over 40 items in the line, with several sizes of each, some in cartons, some in metal and others in fibre containers, and with each item embellished with a different three-color combination, it had become increasingly difficult to create an attractive store shelf display.

"When the old design was first originated," explains Mr. Teeter, "it was not foreseen that the company might some day have so many items; so color combinations were no problem. However, with items constantly added to the line, every color combination under the rainbow had eventually been employed and consequently color clashed very badly. Furthermore, red, black and yellow in their gaudiest contrasting colors not only dominated the Dr. Salsbury line, but 80% of our competitors had adopted practically the same colors, which gave our product very little distinction on the

COMPARISON of new design treatment (left) with old. Former package lacked effective use of white space and had crowded appearance. It lacked an identifying symbol and lacked recognition because it subordinated the Salsbury name.

IMMEDIATE IDENTITY from all angles for display versatility is provided by use of trademark symbol on several panels. Compact "Dr. S" symbolic cross in circle is easily accommodated even on smallest of containers.

USE OF WHITE SPACE plays important part in creating a clean-cut, ethical atmosphere for the new packages. Labeling problem is complicated by the relatively large amount of copy required on these products by the FDA.

shelves and caused complete dealer and consumer confusion."

There were also several technical difficulties. The close color registry required by the old design was an almost impossible job, while the large amount of copy required by the Food and Drug Administration had a tendency to spread all over the package, making unified package design out of the question. Also, the name "Dr. Salsbury," which had wide acceptance in the poultry industry, was hardly discernible in the former design treatment.

Because heavy advertising support was necessarily limited to only certain items in the line, the company insisted upon more prominent use of the company name on the package, as an aid in merchandising the entire family of products. It was also decided that a symbol, or trademark, should be incorporated to facilitate quick recognition of the company's products and which could be carried over into its advertising and promotional activities.

Since the company's products divided logically into four well-defined groups, it was decided to employ an identifying color for each group, chosen so that they would harmonize pleasingly and be tied together unmistakably by the same family design. Although a three-color combination had formerly been used on each package, the company recognized that a much more powerful and less confusing merchandising job could be done with two colors—and at far less expense.

For the new line of packages, labels, etc., four harmonizing pastel colors were chosen: blue representing poultry medicine, green for biologics, red for disinfectants and insecticides, and brown for miscellaneous farm products.

With this color treatment, effective mass displays of the Dr. Salsbury's line may be set up which have an attractive, dignified appearance. The confusion which characterized a similar grouping of the old packages has now given way to orderly division of the various items into the four basic types.

The styling of the new packages provides a sense of dignity and the feel for reputable merchandise, achieved through use of the cross trademark and simplification of the all-over design. By briefing and blocking the copy in areas, more of a focal point of interest is acquired on the label face. The use of carefully defined areas of white space and a horizontal band encircling the package provide a three-dimensional feeling of depth.

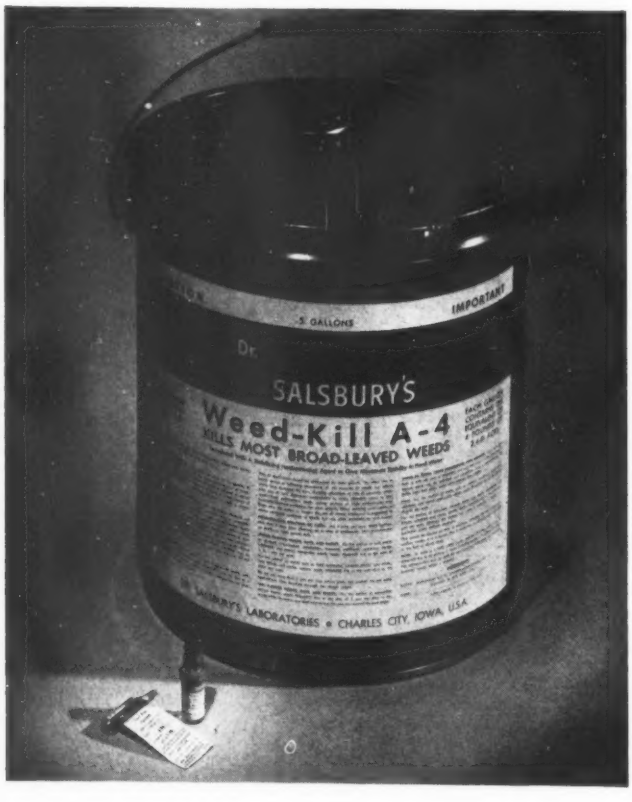
Unifying the company name and trademark with a cross intensifies the identity of the packages and is expected to promote recognition of the trademark as the symbol for the entire Dr. Salsbury line. The cross is now carried as an identifying device on all the cartoned packages. Also the name "Dr. Salsbury," which had wide acceptance in the agricultural fields, was hardly discernible in the former design treatment.

By combining the basic colors of red, green, blue and brown with black, it is now possible to gang many of the labels together on the press runs, thereby producing labels for several products at the same time. This procedure permits important economies as compared to the former three-color packages, which had to be run singly because of the many different colors involved.

"In the new package design," says Mr. Teeter, "we feel that we have attained (1) quick, enticing product identity, (2) new package richness which might inspire a sense of product confidence, (3) maximum shelf legibility and (4) a well bred 'family' feeling which will make Dr. Salsbury's line stand out from the crowd in mass displays.

"We have been very pleased with the new packages and their reception by our salesmen and our dealers. It has certainly modernized the appearance of the line and simplified production of labels. When the entire line has been converted to the new design, we are confident that the new package will act not only as a much-improved container, but as an excellent advertising medium as well."

ADAPTABILITY of the new design to all shapes and sizes of packages is indicated by this photograph of three products in the line. Despite the small label area afforded by the ampule and vial, the distinctive cross trademark is as effective here as on the large 5-gal. drums.



CREDITS: *Redesign program, Raymond Loewy Associates, Chicago. Folding boxes, American Coating Mills, Division of Owens-Illinois Glass Co., Elkhart, Ind. Collapsible tubes, Sun Tube Corp., Hillside, N. J. Bottles, S. Riekes & Sons, Omaha, Neb., and Owens-Illinois Glass Co., Toledo, Ohio. Fibre cans, Sefton Fibre Can Co., St. Louis, Mo. Bottle labels, Waller Printing Co., Charles City, Iowa. Labels for fibre cans, Associated Lithographers, Inc., Des Moines, Iowa. Corrugated shipping containers, Gaylord Container Corp., St. Louis, Mo. Metal cans, Continental Can Co., Inc., New York.*

CROWNED "M" makes a happy symbol for Majestic, denoting quality and tying in with the long-established brand name. Use of standard dark blue, yellow and red colors makes for economical label production. Symbol is repeated on jar caps.

Emphasis on quality

MAJESTIC FOODS ACHIEVES IT

WITH A BOLD LABEL REDESIGN FEATURING A REGAL INITIAL

Realizing that changes in merchandising techniques in the food industry are placing more and more emphasis on the package, Helwig & Leitch, Inc., Baltimore, packers of the Majestic line of pickles, mayonnaise, condiments and related products, recently redesigned their 30-year-old labels to make them reflect the quality appeal inherent in the name.

When company officials first decided that the labels needed modernization, they were fearful that any drastic change might kill recognition of the brand, established over 60 years ago. Cautiously, a few minor alterations were made. They didn't seem to improve the label's appearance materially. Finally, convinced that half-way measures wouldn't be successful, the company called in an independent package designer.

First consideration was given to a critical analysis of the die-cut label. It was found that considerably more of the label area could be allotted to brand identification through careful organization of the required legal information. Each element was given equal status in the old design. The brand name, the product name and ingredients, and the company name and address were each allowed one-third of the total space and the result was that none of them really stood out.

Since the goal of the redesign was to keep brand recognition, the designer concentrated on giving the trademark as much space as possible. The word, "Majestic," was too long to permit much enlargement, so a large golden "M" and crown insignia against a dark blue background was introduced. The crown, which had been used previously as a small emblem, is now presented in a stylized form and treated boldly as a symbolic design feature. The heroic size of the crowned "M" provides instant recognition.

The company's name and address have been transformed into a decorative element by printing them as a border around the top half of the label. The placement of the firm name clears the bottom part of the label for imprinting the contents identification, ingredients and weight, etc., which appear in red on a white background.

The new label design, while more effective, permits economical production. The designer has used standard lithographer's dark blue, yellow and red so that the labels may be run on large sheets together with other orders. Or, if they are to be run separately, they become a two-color job with a substantial run plus red imprinted for different items in the line.

The cap design was revised to repeat the "M" insignia and allow sufficient white space for price marking. A shrink-type cellulose sealing band is used on the mayonnaise and salad dressing bottles.

CREDITS: *Design, Royal Dadmun, Baltimore. Jars, Tygart Valley Glass Co., Washington, Pa. Labels, Piedmont Label Co., Inc., Bedford, Va. Sealing bands, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del. Caps, Trio Metal Cap Co., Chicago.*

OLD LABEL was just another brand on the grocery shelf. Name was unrecognizable 10 ft. away; the crown symbol was too small and too conventional to have any significance.

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MODERN PACKAGING

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1 Illustrations of the package on the shipping container help introduce the new insecticide, "Cook-Kill," produced by Cook Chemical Co., Kansas City, Mo. The shipper can be displayed on the dealer's floor. Initially, a plastic sprayer, selling for one cent, is attached to each 32-oz. amber round bottle. Cartons and bottles, Owens-Illinois Glass Co., Toledo, Ohio. Plastic sprayer molded by Calmar Co., Los Angeles, of Bakelite Corp. vinyl.

2 The effectiveness of the new packaging for Jell-Aire molds is believed by the maker, United Aircraft Products, Inc., to have resulted in larger orders for the molds. The display carton doubles as shipper for the sets of molds, individually packaged in window cartons. Color scheme of the packaging is white, red and yellow. Design, Gerald Stahl, New York. Boxes, Triborough Box Mfg. Co., Brooklyn.

3 Light-weight glass jars and lithographed metal screw-on caps are features of the improved packaging for 50-year-old Silver Suds polish made by Silver Suds Co., Philadelphia. The polish is packaged in two sizes, 8 and 16 oz. Jars, Hazel-Atlas Glass Co., Wheeling, W. Va. Caps, Crown Cork & Seal Co., Baltimore, Md.

4 The neat, flat shape of Pond's new Dreamflower talc container is designed to fit comfortably in the hand. The famous floral design of the Dreamflower family has been adapted to the can. The gold shade of the lettering in the bands is picked up by the gold-colored metal cap which fits over a sifter top. Design, Joseph B. Platt, New York.

5 An ethical treatment is followed in the design of Colgate's new ammoniated tooth-powder package. Ingredients of the new product are emphasized by reverse printing in a new color—brown—added to the famous red and white color combination. The lower two-thirds of the package, both can and carton, carries a tan and white striped background. Another modern note is the use of a white polyethylene friction cap, for moisture-tight reclosure. Can, National Can Corp., New York, and Continental Can Co., New York. Carton, National Folding Box Co., Inc., New Haven, Conn. Cap molded by Samerie Engineering Co., Riverdale, N. J., of Dow Chemical Co. and Bakelite Corp. polyethylene.

6 Kordite Corp., Victor, N. Y., sells its new plastic-impregnated clothesline in continuous lengths—formed into hanks—with two hanks connected so that shoppers can purchase as long a line as they need. To package the hanks, a cellophane bag is used with brand identity, instructions for use and advertising copy colorfully printed on it as a band. Bags, Shellmar Products Corp., Mt. Vernon, Ohio.

PAGEANT

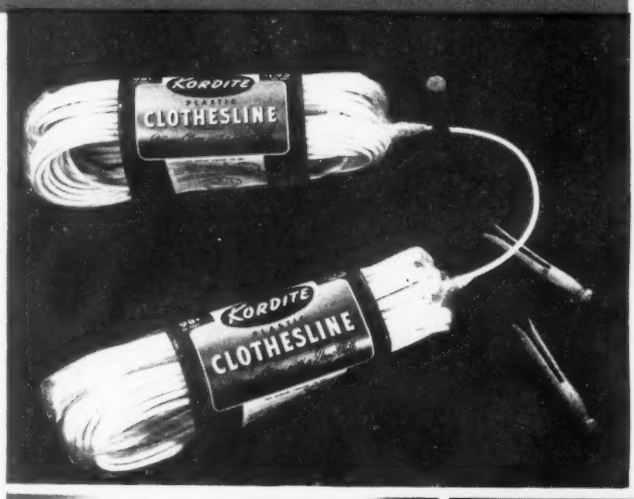
7 One of the largest flag makers, Annin & Co., Inc., New York, brings new glory to "Old Glory" through the adoption of this handsome, dignified package that can be used in store displays. Attractively printed in red, white and blue colors, the metal-edge box makes the national emblem an unusual gift item. Cartons, National Metal Edge Box Co., Philadelphia.

8 Cap'n Corky—The Party Pork—is a novel new bar accessory introduced by Howard L. Ross Associates, New York. Made of a plastic compound that closely resembles ivory, the little pig's metal tail is a cork screw, his snout a bottle opener. His eye-appealing gift package consists of a transparent cellulose acetate cover printed in green and white inks and a paperboard base. Design, Kent Studios Service, Inc., New York. Box, Geo. V. Clark Co., Inc., Astoria, N. Y.

9 Lithographed collapsible tubes of aluminum are being used as the new container for liquid hide glue made by The Franklin Glue Co., Columbus, Ohio. The light-weight aluminum tubes are reported to have lowered shipping costs, while their non-toxic qualities are said to prevent the glue from discoloring. New display cartons complement the eye appeal of the tubes. Design, Sales Color Service, Erie, Pa. Tubes, Aluminum Co. of America, Pittsburgh. Display carton, Columbus Paper Box Co., Inc., Columbus, Ohio.

10 Convenience for the user is the thought behind the handy cotton-filled dispenser being sold as a special deal with the 25-cent size of Cutex Oily Polish Remover. The bottle is assembled at Northam Warren Corp.'s plant with this die-cut, candy-striped printed paperboard carton which has the wrap-around flap.

11 A new finger-rest bottle and colorful package are features of the most recent design for Chen Yu finger-nail polish now appearing in 12 new shades and with a new formula. The bottle is molded so that the shoulders have two spaces where fingers may be rested while the polish is applied. The cap has a modified plume-type handle for easy application of the brush. The paper-board box has an oriental dragon design printed in red, gold and white. Bottle, Swindell Bros., Inc., Baltimore, Md. Cap, Raymond Laboratories, St. Louis, Mo. Label, A. L. Reid Printing Corp., New York. Carton, Warner Bros. Co., Bridgeport, Conn.



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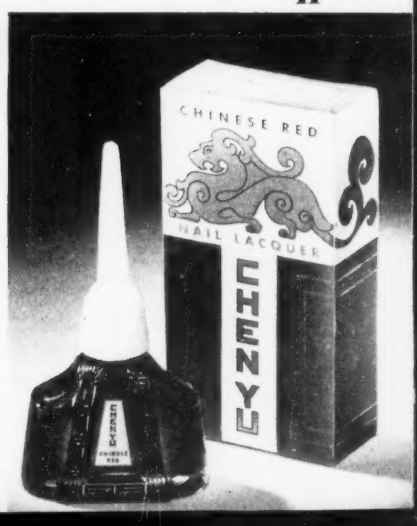
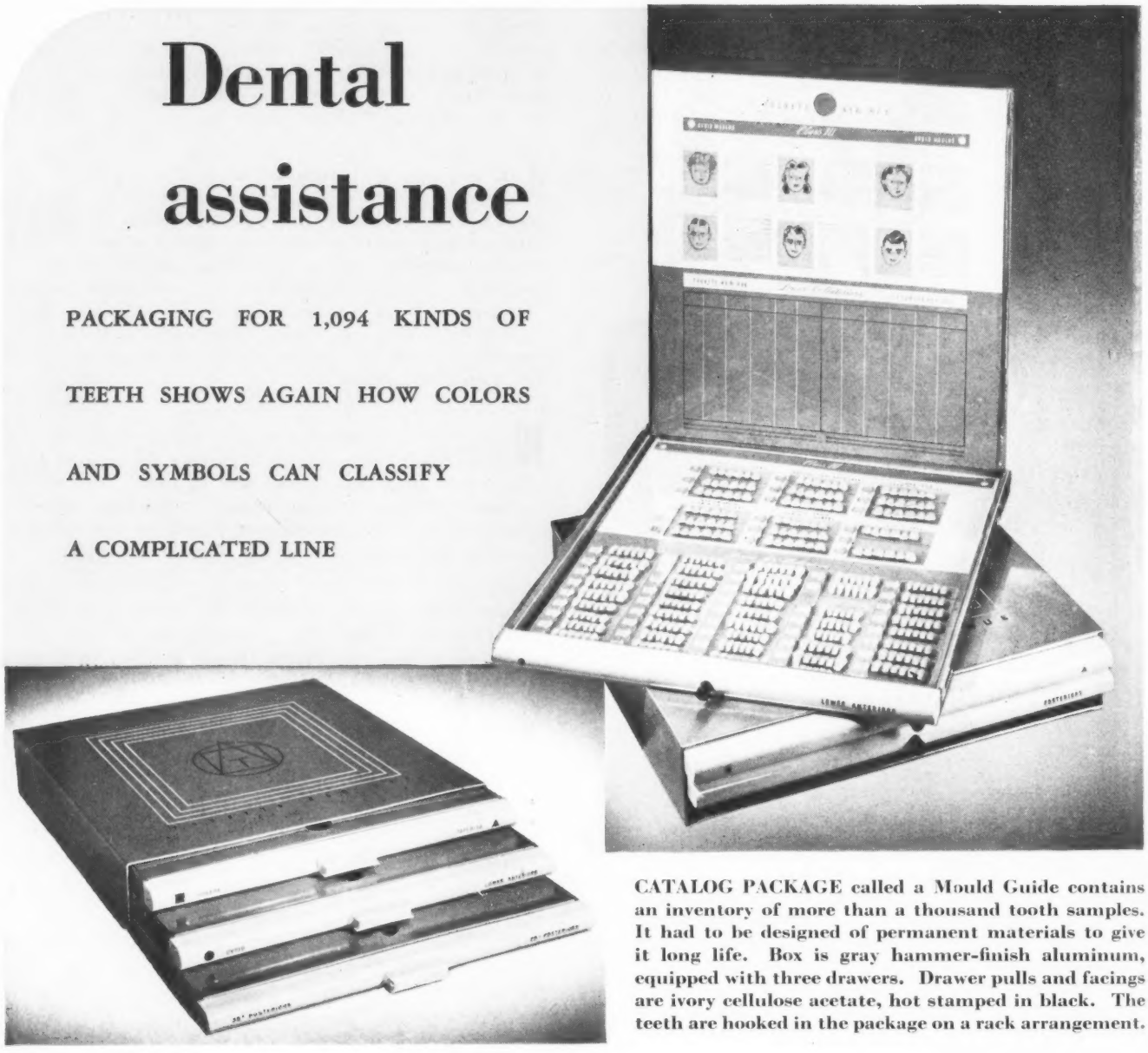


Dental assistance

PACKAGING FOR 1,094 KINDS OF TEETH SHOWS AGAIN HOW COLORS AND SYMBOLS CAN CLASSIFY A COMPLICATED LINE



CATALOG PACKAGE called a Mould Guide contains an inventory of more than a thousand tooth samples. It had to be designed of permanent materials to give it long life. Box is gray hammer-finish aluminum, equipped with three drawers. Drawer pulls and facings are ivory cellulose acetate, hot stamped in black. The teeth are hooked in the package on a rack arrangement.

The Dentists' Supply Co. of New York, one of the largest manufacturers of artificial teeth, has adopted unusually effective new packaging for its complete line of teeth. Special as this product may be, the packaging principles demonstrated are worthy of study by all packagers.

The redesign program which was undertaken had a three-fold purpose:

First, to make it easier for the dentist or dental laboratory to select from the shelf the various product types of teeth by color differentiation of the packages.

Second, to provide a strong family design resemblance for the line of teeth sold by Dentists' Supply Co. and to stress the professional prestige of the company name, which has been in existence for 50 years and is known on five continents.

Third, to supply a promotional aid for dealers and regular sales forces in the form of a permanent "Mould Guide" package containing a basic inventory of 1,094 teeth samples, arranged according to shape, type and coloration, which the dentist may have on hand at all times as an aid in selecting the proper teeth for prosthetic work.

Mould Guide package

One of the most interesting parts of the program was the development of the "Mould Guide" in cooperation with the company's design consultants. Because of its function—actually overlapping as a piece of dental equipment in the dentist's office—this package had to be designed of materials that would give it long life. It consists of a gray hammer-finish aluminum box with one end open and slotted to receive three drawers of teeth. The drawer pulls and facings are ivory cellulose acetate with index information hot stamped in black. The trademark, done in red and placed inside outline box rules in white, is silk screened on the face of the box. Inside each drawer, the teeth are hooked on a rack

arrangement so they may be taken out and replaced in cataloged position according to color, shape and type of teeth.

The "Mould Guide" is supplied to the dentists at a figure lower than cost, as an added incentive and as an improved service feature for the dentist who stocks the Dentists' Supply Co.'s line. It is a valuable aid to dealers and salesmen in servicing accounts and for increasing sales volume over a long period of time.

Packaging for regular line

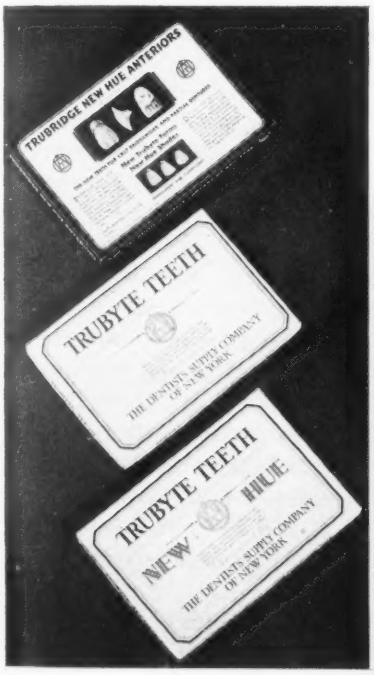
The regular line of packaged teeth distributed by the Dentists' Supply Co. consists of six product types. All are packaged in set-up telescope boxes, convenient for use and storage. Because the paperboard telescope set-up boxes are identical in size and shape for each of the products, a basic design problem was immediately seen in the restyling. Obviously, a close family identity for the related line was desirable, but a visual method of quickly identifying each of the various products was necessary.

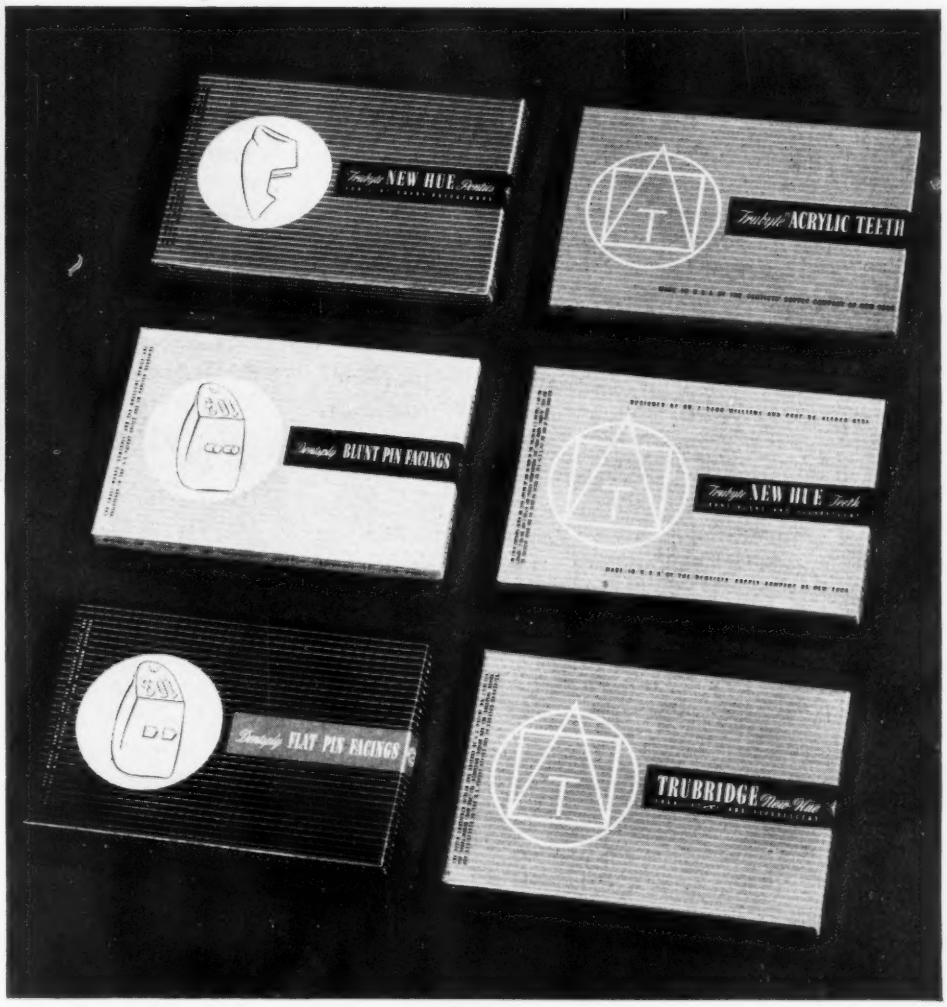
The design problem differed from the usual one, therefore, in that it was not one of adapting a related design to different shapes and sizes, but of establishing a design in a way to permit easy recognition of the different products.

A basic layout was therefore adopted for all the packages with a differentiating color for each of the six product types. Reverse white horizontal lines appear on backgrounds of the various colors. The left side of the front panel bears a reverse white design—sometimes the firm's geometric trademark and other times a circle of white in which a line drawing has been placed. On the right is a horizontal color panel bleeding across the end of the package and displaying the product name in reverse white.

Those packages with the geometric trademark are the Trubyte Acrylic Teeth—a newcomer to the line—plus the Trubyte and Trubridge New Hue Teeth. The Dentsply Blunt, the Flat Pin Facings and the Trubyte

OLD BOXES did not have quality appearance to express prestige of the company name. There was no color differentiation for convenient selection. Former packages, it was felt, were not in keeping with the ethical nature of the product.


TRUBRIDGE NEW HUE ANTERIORS
TRUBYTE TEETH
THE DENTISTS SUPPLY COMPANY OF NEW YORK
TRUBYTE TEETH
NEW HUE
THE DENTISTS SUPPLY COMPANY OF NEW YORK



REGULAR LINE of teeth, consisting of six product types, is packaged in telescope set-up boxes identical in size and shape, convenient for use and storage. Basic layout was adopted for all, with differentiating colors for each box. Three carry the company's geometric trademark and three have line drawings calling attention to special features.

AFFIXED TO CARDS, the teeth are arranged inside the boxes according to colors, in sets. In this way, the teeth are easy for the dentist or the laboratory technicians to store and select.

New Hue Pin Pontics packages carry the line drawings showing special features of the products contained inside.

The variation of the line drawings was adopted for packages containing particular products which possess features developed and exclusively manufactured by the Dentists' Supply Co. Similar line drawings had been used on the old packages and these were adapted in a manner to be in keeping with the design of the new packages.

Trademark significance

The geometric trademark design is an excellent device suggesting the character of the firm and its products. Visually interesting in itself as an abstract form, its elements are actually the basic geometric forms used in precision measuring, upon which the designing and production of dental supplies and prosthetic equipment depend. The "T" signifies "Trubyte" which is the brand name, as well as bringing to mind a T-square, and appears inside a figure composed of a circle, a square and a triangle.

Still another cornerstone of company principle is implied by the trademark. The firm's laboratory technicians and research dentists work on a premise that there are three facial types—round, square and triangular. A person with a round face usually has more rounded teeth; a person with a square face is likely to have square teeth; someone whose face tends toward the triangular has teeth of similar shape. This theory of tooth design is thus implied by the trademark symbol.

Lithography on clay-coated stock was chosen for the printing of the paper wraps. The various colors are unusually bright for an ethical product such as this. The conventional coldness of white areas often seen in ethical packaging is avoided.

Skillful use of color

The cost of the wrap production, the company says, was not a basic consideration and it was originally planned to use three colors throughout, but a skillful adaptation of colors to various design elements by the designer permitted the economy of only two colors for two of the packages—the Trubyte New Hue Pin Pontics and the Dentsply Flat Pin Facings.

Background colors, seen in mass, present an attractive range of hues—dark blue, turquoise, yellow, orange, gold and gray. Contrasting colors were to harmonize with the specific background colors. The informative side panel of the turquoise Trubridge New Hue package is a darker shade of the same color, with reverse white lettering and trademark, and informative copy in black. Trubyte Acrylic Teeth appear in an orange box with a dark blue panel, reverse white lettering and trademark, plus black copy.

The Trubyte New Hue Teeth, especially packaged for the export market, are done in gray with a red panel, the usual reverse white treatment and black lettering. The latter package bears more informative copy than do the others, which is needed for markets outside the United States.

Trubyte New Hue Pin Pontics are packaged in a gold box with a dark blue panel with the dark blue used for the lettering and line drawing, thus eliminating a run of black. In the case of the Dentsply Flat Pin Facings, the background is dark blue, the panel gold and all lettering reverse white. Dentsply Blunt Pin Facings appear in a yellow box with a brown panel and the usual reverse white and black lettering treatment.

With sales concentrated in the professional market, Dentists' Supply Co. sends out an abundance of direct mail describing feature improvements and better product performance. This promotion provides excellent support for the new packaging program.

CREDITS: *Design of packages and Mould Guide, Lippincott & Margulies, Inc., New York. Mould Guide container made by Lewyt Corp., Brooklyn. Lithographed wraps, Duenewald Printing Corp., New York. Boxes, Lebanon Paper Box Co., Lebanon, Pa., and I. D. Souders & Co., Philadelphia.*

Biggest packaging machine

IT AUTOMATICALLY WRAPS STACKS OF 4- BY 10-FOOT WALLBOARD, PERMITTING FOUR MEN TO DO THE WORK OF 18

Heralded as "the world's largest packaging machine," a mammoth, 50-ft.-long machine in the Dubuque, Iowa, plant of Maizewood Insulation Co. currently is turning out packages that are quite probably the largest ever to be wrapped automatically.

The machine handles stacks of insulating wallboard as large as 4 by 10 ft., wrapping them in 90-lb. kraft paper with reinforcement strips and glue sealing them, at a rate of better than 100 an hour. With the machine, four men handle a volume of production which, by the old hand-wrapping method, would require 18 men for packaging and handling. Success of the machine, which was custom built for this job, suggests impressive savings possible by a further extension of mechanized wrapping in building materials and the whole field of bulky, hard-to-handle objects.

At the Maizewood plant at present four attendants are required to load the stacks into the machine and remove the wrapped stacks from it. With plans under way for adding a roller conveyor at the end of the machine and with the further possibility of an automatic loading device, it is anticipated that one man may be able to handle the entire operation.

Paper costs incidentally have been reduced 15% by this new automatic wrapper, according to reports by the company, since a narrower roll can be used and still result in the production of a satisfactory package.

The machine operates by the following steps:

1. Four-foot-wide insulation board in stock lengths (which may be 6, 7, 8, 9 or 10 ft.) are brought from the warehouse to the machine on pallets.

2. Two men lift the board from the pallet and stack six $^1/_2$-in. sheets or eight $^3/_8$-in. sheets on a crossfeed conveyor.

3. When the actuating button is pushed, the loaded crossfeed carries the boards into the infeed conveyor, squeezing the boards laterally into alignment.

4. Simultaneously with the preceding step, 4-ft.-long reinforcement strips are fed into place and the wrapping paper is measured out to the accurate length needed.

5. Completion of these phases starts the movement of the infeed conveyor. The bundle of boards and reinforcement strips is pushed into the vertical web of paper. The leading edge is folded and tucked and the side-gluing and folding operations start. During these operations the paper is automatically cut off to proper length.

6. The infeed flight deposits the partially wrapped bundle on the outfeed and begins its back stroke towards the starting position.

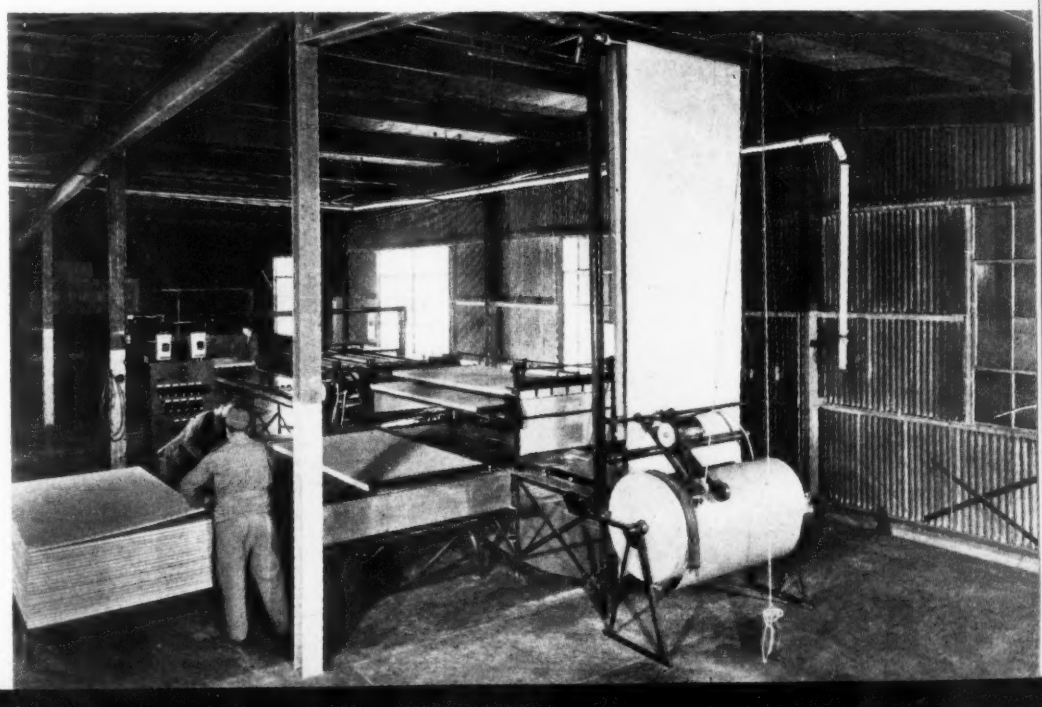
7. As the infeed carriage returns, a glue applicator automatically travels across the end of the package, gluing it. The end is then folded and tucked.

8. The outfeed conveyor then starts carrying the package between two pressing rails to permit definite sealing and at this stage the next package is being started in the cycle.

9. The outfeed conveyor delivers the finished package to two men at the end of the machine, who remove it to a shipping pallet.

The machine does not have to be fed continuously, since the cycle of automatic operation is begun only after the control button has been pressed. It is understood that on an improved model of the machine, loading will be done directly (*Continued on page 200*)

ATTENDANTS are required merely to load and unload stacks of wallboard, which are automatically wrapped and glue sealed. The machine cuts the paper to accurate length and inserts reinforcements in bundle. A package is completed in 35 seconds.

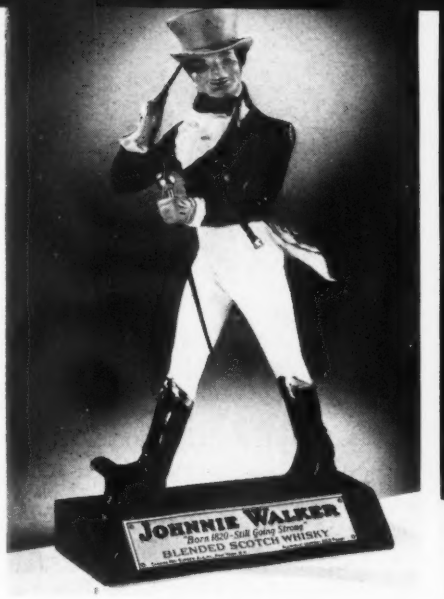


DISPLAY GALLERY

For the first time in its history Sloan's Liniment is being packed in counter cartons, according to its manufacturer, Standard Laboratories, Inc. Line drawings of a shoulder and chest area "before" and "after" application of the liniment are featured on the riser of the colorful new carton now being distributed nationally. Copy on the carton follows what the company calls "the same scientific approach" used for all of the liniment's advertising. The container holds a dozen 2½-oz. bottles and is shipped in a chipboard sleeve. Carton back gives directions for setting up the display. Design, George Reiner, New York. Cartons, E. J. Trum, Inc., Brooklyn.

The opportunity of getting ribbons displayed on the counter has been increased substantially through the adoption by Buser, Inc., Paterson, N. J., of this printed, die-cut folding carton. Previously the ribbons were shipped to dealers in plain gray chipboard boxes and, invariably, the rolls were taken out and stacked on shelves, away from the sight of customers. The attractive new display carton, printed in blue, costs no more than the old, but gives the dealer an eye-catching package to use on his store counter. Since the ribbons are sold through distributors, no brand name is given. Cartons, Franklyn Folding Box Co., Brooklyn.

Hickok cuff links and tie bars are attractively displayed on these small counter stands made of wood. They feature raised strips of transparent cellulose acetate to which strips of red felt have been cemented. The pieces of jewelry are fastened to the raised strip. Although the displays are open, pilferage is said to be difficult as it takes some moments to loosen items from the stands. Displays, Clayton H. Wegman, Rochester, N. Y. Cellulose acetate, "Kodapak," Eastman Kodak Co., Rochester, N. Y.



This jaunty new Johnny Walker statuette distributed by Canada Dry for display on back bars, clubs and package stores is made of molded latex rubber and stands 14 in. high. The figure is hand painted in six colors. It is mounted on a painted block of wood and the metal name plate is attached to the wood base by means of screws. Display, Margit Nilsen, New Milford, Conn.

To tie in with its racing broadcasts, Gillette Safety Razor Co. comes out with this tamper-proof wire dispenser measuring 15 in. high. The card with Gillette's two-to-one bet copy is folded against the back when the rack is shipped. Individual boxes are withdrawn from the back. Display, Einson-Freeman Co., Inc., Long Island City, New York.

Slanting sides of the 24-package display carton for Furl—a new curl rinse recently introduced by T. Noonan Sons Co., Boston—are designed to attract the attention of shoppers in passing store counters. The angle of the slope permits the eye to see the copy printed on the sides more easily than when sides are vertical. Stacking the individual boxes on edge permits a shopper to find her proper shade quickly. Cartons, Cleghorn Paper Box Co., Lowell, Mass.

The newest window display for Helene Curtis' Suave—a hair grooming preparation—relies upon the striking appeal of a beautifully coiffed head and the simplicity of the printed sales message to convey visually the quality of the product. The easel-back display features a die-cut paperboard replica of the Suave bottle set in the foreground against the color portrait. Copy is strategically placed in the banner at the top and in the spot next to the bottle, where it will catch the eye. The entire display, measuring 27 by 24 in., is printed in full color with a three-dimensional effect. Display, The Phillipp Lithographing Co., Milwaukee, Wis.

Copper foil laminated to paperboard and silk screened with opaque inks in vivid turquoise blue and white makes a distinctive counter display card for Dermetic's Sun Sports Lotion. The easel-back display is die-cut to provide a platform to hold a bottle of lotion. Silhouettes, the sun and platform are highlighted against the blue background. Lettering is white. Design, Martial-Scull, New York. Display card, United Lithographing Corp., New York.

Kings Men dollar line

PRESTIGE OF LUXURY NAME IS MAINTAINED BY PACKAGING A SUPPLEMENTARY LINE FOR THE MASS MARKET

CLEAR GLASS bottle with transparent plastic closure is used instead of gold-fired flagon.

IVORY PLASTIC BOWL is same design as that for higher-priced line, but is smaller in size.

LITHOGRAPHED TUBES carry out design motif.

For 10 years, Kings Men, with its flagons and bowls fired in 23K gold, has been recognized as a top luxury line in men's toiletries.

Current trends in the toiletries field, however, indicated that there was also a big market for a more popular-priced line to supplement the luxury line.

The packaging problem involved in developing a less expensive line that maintains the prestige of the luxury line, yet can be produced to sell in a dollar price range, will be of particular interest to other firms who must scale new products to today's consumer pocketbooks.

The new Kings Men dollar line includes nine items: after-shave lotion, after-shave powder, English leather cologne, Castle Eire cologne, Thistle and Plaid cologne, Knight Errant cologne, deodorant, shave soap in bowl and brushless shave cream in a tube.

Development of new line

First step was that of developing a new bottle in a $3^1/_2$-oz. size instead of 8 oz., but at the same time maintaining the same design with knight's head closure. The new container is of plain clear glass instead of one which was fired in gold. The knight's head screw closure on the new $1 flagon is made of transparent polystyrene plastic instead of the gold-plated metal casting used for the luxury product.

The new shaving bowls are also of the same design as the higher-priced ones, but are smaller and made in ivory colored polystyrene plastic with a transparent knight's head set in the lid of the bowl for decoration. This eliminated the high-priced gold-fired bowls used for the more expensive line.

All exterior packaging of individual items is of folding-box construction, colorfully printed and varnished to prevent soiling from handling.

Three basic containers—the bottle, the bowl and the lithographed collapsible tube—are used for the entire line. Three sizes of individual cartons are used for all the products, with slight changes for the nine product designations. In addition, there are several different set packages designed for the gift market which are not illustrated here.

This mass-market line was introduced last fall and although no sales figures are available, reception has thus far been reported excellent.

CREDITS: *Bottles, Swindell Bros., Inc., Baltimore, Md. Ornamental plastic heads and shave bowls made by Blisscraft of Hollywood, Hollywood, Calif., of Monsanto Chemical Co. Lustrex polystyrene. Labels, The Foxon Co., Providence, R. I. Cartons, Standard Paper Box Corp., Los Angeles, and F. N. Burt Co., Inc., Buffalo, N. Y. Tubes, A. H. Wirz, Inc., Chester, Pa.*

18th Annual

PACKAGING CONFERENCE and EXPOSITION

Atlantic City — May 10-12, 1949

The 1949 National Packaging Exposition & Conference was notable for the scope and quality of the exhibits and for the serious-minded purpose of the 11,000 visitors—each of whom, by giving up a day or more for the trip to Atlantic City, recognized the vital role which improved packaging can play in the current necessity for cutting production costs and stimulating sales.

Visitors went away feeling exceptionally well rewarded. With a record of 207 exhibiting companies (20 more than last year) filling 115,000 sq. ft. of the huge Convention Hall with their latest developments in packaging machinery and supplies, the Exposition was a gold mine of information. More than 900 registrants gave close attention to the six sessions of an unusually well prepared Conference program. A Packaging Theatre—a new feature this year—gave a continuous showing of exhibitors' sales stories in movies and slides.

Exhibitors almost unanimously expressed themselves as impressed with the high quality of attendance. The Exposition usually is regarded as a place to make contacts rather than sales, but one typical exhibitor reported that he had actually booked as much business in four days as he would normally expect in four months—and had enough leads to keep his salesmen busy for another four months.

All in all, few would dispute the management's claim that this year's show was the most successful in the 18-year history of the event. While total Exposition registration was lower than in the previous two years at Cleveland and Philadelphia, it was the largest ever recorded in Atlantic City, exceeding the 1946 AMA show there by 1,700. Obviously, of course, a show in Atlantic City does not have the local attendance that is found in metropolitan centers, but such attendance is of questionable quality.

There was a noticeable increase in the number of merchandising and advertising representatives present, reflecting the current merchandising push on packaging. The situation was summed up by Tom F. Dolan, president of The Dobeckmun Co., Cleveland, who said: "The problems of business are increasingly in the laps of marketing personnel, because supply has caught up to ready demand."

Speaking from the machinery makers' viewpoint, Roger L. Putnam, president of the Package Machinery Co., Springfield, Mass., commented that in the buyers' market, "slow and obsolete packaging machinery is now too expensive to be kept in operation. New, modern machinery has become a form of economic insurance."

During the show the Exhibitors Advisory Council confirmed arrangements for the 1950 Exposition and Conference to be held at Navy Pier, Chicago, April 23 to 26. In 1951 the show probably will return to Atlantic City.

Following is a summary of discussions at the six Conference sessions:

TUESDAY MORNING

Chairman, ROGER L. PUTNAM, *president, Package Machinery Co., East Longmeadow, Mass.*

The Short Term Outlook for Packaging Materials—LEE R. FORKER, *general purchasing agent, Quaker State Oil Refining Corp., Oil City, Pa., and chairman of the container committee, National Assn. of Purchasing Agents.* We issue quarterly reports, Mr. Forker explained, representing the consensus of this group (Container Committee). Our container report deals with trends, availability, changes in supply and demand, new development, research, inventory status, etc. We likewise forecast demand and supply. I personally believe that our forecasts are realistic, considering that these individuals from whom the information is gathered are directly responsible to their respective companies for purchasing and scheduling millions of containers.

It can be recorded that as the supply surpasses demand, creating unused capacity for manufacturing containers, conditions have become extremely competitive in the container industry for the first time in 10 years. From our observations we believe that container costs in general will be lower before the end of this year than they were on an average for 1948, but still container costs will be much higher than prewar.

Our observation is that for container prices this appears to be a "watch and wait" period. Competition is closely watched for current price changes and manufacturers are waiting for the substantial volume of container consumption expected for America's food crop, with the pack primarily to be handled May through September. Present labor costs and the trend make it very improbable that container costs to the buyer will be substantially reduced.

Availability of packaging equipment in general is much improved. Most machinery manufacturers are now able

to schedule reasonably prompt delivery. Since packaging machinery is often standard only in the basic sense and generally must be adapted to the customer's particular requirements, it is seldom that shipment of packaging machinery is less than 90 to 120 days.

The glass container industry is unique inasmuch as it appears that supply satisfied demand for glass containers first in *all* classifications. As competition continues, with resultant price changes, it is quite possible that many products will return to glass, especially if metal containers continue their upward trend of cost.

At the present there seems to be an ample supply available for all foreseeable uses in every case of plastic materials for containers, except possibly for polyethylene.

The short range outlook for paper containers indicates that the supply will be adequate.

The demand for packages, in general, will continue to reflect the general economic conditions, with demand per capita increasing with each passing year.

The Economic Outlook for Packaging Suppliers and Users—CHARLES E. LEWIS, *Office of Domestic Commerce, Dept. of Commerce, Washington, D. C.* Packaging has gradually become one of the major elements of our economy. The container and packaging job, today, has become so closely wedded to over-all business activity that it is recognized by many as one of the true barometers of industrial and business activity.

Containers and packages consume a larger portion of the over-all supplies of the nation's basic raw-material output than almost any other product. Look at steel, for example. In 1948, steel ingot production was approximately 88.5 million short tons, resulting in about 66 million tons of finished steel. Of this, about 5.3 million tons of the finished steel, or 8%, was chewed up in the production of containers and packaging materials. In 1948 approximately 22 million tons of paper and paperboard were produced in this country; it is estimated that of this total, about 44% went into containers and packaging.

Let us take a look at general business activity. General demand, while not as strong as last year, appears to be picking up after a low start and can be reasonably expected to hold fairly steady at present levels the rest of the summer. The slow down in general business demand after the Christmas holidays indicated to a considerable extent that seasonal trends were again returning. However, when the post-holiday decline in demand in some categories of goods went temporarily beyond what industry liked to call a normal seasonal trend, it appears industry and business got rattled up and down the line. For example, in a number of industries there had been right up through the close of 1948 a big gap between demand and supply. Almost all producers in these industries, without exception, had large backlogs of orders. In addition, both producers and consumers had considerable expansion programs going ahead. But what happened after the first of the year when ugly rumors of a pending general business slump began to be voiced? The expansion programs were cancelled overnight and from what was a seller's market one month, a buyer's market turned up the next. It looks to me, gentlemen, like a lot of this sort of thing happened and it's this seemingly easy loss of confidence in itself that American business has to fight and overcome today.

The over-all physical volume of business, while it has leveled off from 1948, is still around 1947 levels.

Coordinating Packaging, Production and Sales—NEIL MCCASH, *manager, label division, The Kroger Co., Cincinnati, Ohio.* In the Kroger company, we believe the statement, "without a package you have no product," is true. Because we believe it, packaging as a selling tool receives the attention of every person in the organization, from men and women in the stores to the men in the front office. Because of the recognized importance of packaging we have had to develop a high degree of coordination between the many divisions involved in packaging.

In addition to retail stores, Kroger does some manufacturing. Candy, salad dressing, peanut butter, coffee, tea and other items are made or processed in the factory located at Cincinnati. Fifteen bakeries located strategically in Kroger territory make bread, cakes and sweet goods. There are also two cookie and cracker bakeries.

Each unit is involved in packaging in one way or another. Not only are the manufacturing units producing and packaging, but the retail stores are involved in packaging. Stores pre-package produce, meats and cheese. Also packaging Kroger private-label products are outside manufacturers.

There are three major divisions intimately concerned with packaging: the Operating Division, which is responsible for the mechanical and physical set-up of the business such as trucking, warehousing, transportation, store layout and store operation; the Merchandising Division, responsible for sales and buying, sales promotion and advertising; and the Manufacturing Division, charged with production of all Kroger manufactured items. The divisions are headed by top executives at General Office in Cincinnati. There is a similar organization set-up in each of the 26 branch offices.

It is important that we have a clearing house or focal point where packaging problems and efforts may be integrated with the activities of other divisions. In the Kroger company that clearing house is the Packaging Department. The function of the Packaging Department is to keep abreast or ahead of the thinking of the three major divisions just named and to work closely with our Quality Control Laboratories and our Research Department.

In the Kroger company the Packaging Division is part of the Sales Promotion and Advertising Departments. If the package is to be a potent selling force, the design and selling ideas embraced in the package should be closely allied with the policies and sales strategy of those departments. The Packaging Division then should be close to or part of those departments. On the other hand, ideas for new packages and labels may, and do, originate anywhere in the organization. However, in order to prevent duplication of effort, the development of new packages and exploration of new packaging ideas are delegated to the Packaging Division.

It is the responsibility of the Packaging Division to inform all other departments of its activities, solicit their aid and guidance and, in a way (a very subtle way), arbitrate disagreements resulting from packaging problems involving production and sales. Fortunately disagreements are usually rectified without bloodshed. I do not mean to imply that everything between the various Divisions runs along as slick and smooth as a bar of soap in a shower. We do have some healthy arguments, but we know that everybody is playing on the same team and if we want to come through with a high score we must work as a team.

Let us never forget that no matter how good the package

may appear to us, how easy it is to get through a machine, how cheap or costly it is to produce, or how much praise it may get from a jury of awards, that package is not worth the space it occupies unless the people before you lay their cash on the barrel head and take the package home.

TUESDAY AFTERNOON

Chairman, ROBERT MUELLER, *managing editor, Progressive Grocer, New York.*

The Retailer Looks at Packaging—Representatives of four major types of retail outlets—food, drug, variety store and department store—spoke as friendly critics on the packaging characteristics in these fields during a panel discussion. Mr. Mueller, as moderator, started the discussion with an introduction stressing that in the food field, the emergence of self-service type stores had made profound changes in consumer shopping habits. With nearly two-thirds of the total grocery and combination store business done by self-service stores, he pointed out, factors which influence consumer buying decisions have changed. According to a recent survey 75% of shoppers questioned as they entered self-service stores had no shopping lists. These shoppers went into the store with their minds wide open to suggestions, looking for menu ideas, what to buy, ideas to save money and expecting to be reminded of all the things they used to jot down. So the store itself now acts as a mammoth shopping list, a giant billboard featuring more than 2,000 items. Mr. Mueller explained the results of a series of tests conducted on the placement of packages on shelves and how their position affected sales. Brand A coffee sold 44 packages the week it was displayed at eye level, but only eight packages when on the bottom shelf, was one example. He suggested that it would be a good idea to see how the package appeared to the customer when it was displayed below or above her eye level.

Another major selling factor in self-service is the presence or absence of price marking. Many packages have no blank space for the price imprint and he reviewed the results of a test made in four leading stores where 12 popular items were selected, all price marks rubbed off and the items left on the shelves for one week. The following week price marks were restored and sales were compared. When prices were absent, total sales amounted to $54.05; when all items were priced, sales were $167.02—an increase of 209%. He made a plea that when price spots are provided, enough space be left for multiple-unit pricing.

The last factor affecting consumer buying habits was special display. From the packaging viewpoint, retailers are anxious to get packages which will stack well.

PAUL J. CUPP, *zone manager, American Stores Co., Kearny, N. J.*, speaking as the food-store critic, emphasized the importance of the retail price on the consumer unit also. One of his criticisms was the difficulty retailers have in marking transparent film packages.

The problems of pre-packaging facing the retailer were stressed by Mr. Cupp. We must recognize that packaging of perishables such as meats, fresh fruits and vegetables, is under trial, he pointed out, and that however promising it may look, it is not without problems and dangers. Since perishability and quality control can quickly make all the difference between success and failure, the retailer who prepackages in the store is faced with production problems with which he has very little experience. As rapid as is the trend in pre-packaged meat—and for the six months from Aug. 1, 1948, the number of self-service meat departments in the United States virtually doubled—it must be said that packaging methods by any standards of good work are still primitive and high cost. Much refinement must come. Retailers who have devoted all of their business life to selling, do not possess the knowledge or type of thinking of industrial engineers and because of the instant consumer acceptance they are tempted to plunge into a line of endeavor that is basically manufacturing.

From a consumer point of view there are three things that weigh heavily in her vote for or against packaged perishables. First is the size of the package. There is a tendency to offer quantities too large for many families, suggesting that a choice of package sizes is desirable.

Second, there is the visibility of the contents. There exists a very definite relationship between visibility and acceptance. The further we get from full visibility, the lower the sales potential.

Third, and perhaps most important, is the need for uniformly high quality in the package, not when the merchandise is packed, not when it is purchased, but when it is opened at home, for only then is the impression made that says "yes" or "no" to this new method.

JOSEPH GRIFFITH, *vice president of Pennsylvania Drug Co., New York*, as panel member for the drug retailer, enumerated a series of suggestions drug store men had written to him, including the advantage of price spots on drug store packages, the impracticality of many cosmetic packages that have color schemes and or materials which show soil after they have been on the shelves a short time.

Drug retailers complained about jars that are designed so they won't stack well for display; the lack of display-appealing packages which drugstores now handle They are interested in more versatile types of packages, particularly those which are re-usable, since they arouse shopper interest. Closures for cosmetic and drug packages were retailers' "gripes" because so many of them break. From a packaging angle, retailers want better protective packing of bottles; they would like to have the number of sizes packed in a shipping carton reduced as well as the unit quantity so that unbroken cases can be sent from the distributor and inventory kept under control.

The variety store representative was J. W. EDGERTON, *marketing manager, W. T. Grant Co., New York.* He pointed out that the variety store is an excellent place to test package acceptance because the self-selection factor is so strong in this selling field. The three-foot distance across the counter between the customer and the sales person is all that counts, but until that distance is reached the package itself on display must sell. He said that according to a *Chain Store Age* survey 99% of packages in variety stores failed to stop traffic. What the manufacturer can do to remedy this, according to Mr. Edgerton, is (1) tell the customer about the merchandise on the package, (2) repackage the merchandise in up-to-date packages which enhance the product value by attractive appearance, keeping it fresh and clean and which are suitable for use in window displays; (3) take advantage of multiple-unit packaging; (4) keep the size of the package so that it can be displayed on counters without wasting space; (5) get merchandise to the store in good condition and (6) check with variety-store management to see what packaging is really marketable.

HILDRETH LANGE, *package and product design manager, R. H. Macy & Co., Inc., New York*, presented the depart-

ment store views on packaging from the retail viewpoint. She said that the packaging field is overcrowded with bores, dull things that take valuable space. People respond to new labels and new packages in much the same fashion as they respond to new clothes. The American market must be alert to packaging ideas from Europe. The chic simplicity of their design is outstanding.

Deploring the "sameness" in any assortment of packaging, Miss Lange said that it rarely makes a customer stop and it retarded decision at the point of sale where the time element is of vital importance to a store figuring the cost of its space on a linear footage basis.

Qualities which will make a package sell itself in a minimum length of time may be attractive design, strong motif or exciting use of color. Orginality—a package that is different from others—is an important quality, since its remembrance value is helpful for repeat sales and has advertising value to the store.

The plan and style of a package is important. The composition must include all sides so the article viewed from any angle presents a forceful picture. Often a package looks a perfect gem in the hand, but loses its drama when displayed in mass. The short end of the package is most probably faced toward the customer in a massed shelf display and this area of the package has more than likely been neglected in the design. The stunning top label has been completely lost in the stacking.

Finally, the materials and construction of the package must be balanced in their relation to the product. Glass should look like glass, metal like metal and plastic should make no attempt to disguise itself. The form of the design must be functional as well as charming. Bottles must stand and carry well. Packages must not burst; jars not fall off the shelves. Closures must be accurate and easy to open—department stores have many returns in this category and do not favor accounts whose items can only be successfully opened once.

During the question and answer period ROBERT G. NEUBAUER, *Bridgeport, Conn.*, S. SILFEN, *agency display manager of United Cigar-Whelan Stores Corp., New York*, and MARIE SELLERS, *director of consumer services, General Foods Corp., New York*, contributed to the discussion as experts on design, display and consumer preference, respectively.

WEDNESDAY MORNING

Chairman, DR. ROGER V. WILSON, *director of customer research division, Continental Can Co., Inc., Chicago.*

Plastic Bonding Techniques—Dr. FRANK C. CAMPINS, *president of Polymer Industries, Inc., Astoria, N. Y.* Reviewing the fundamentals of plastic bonding techniques, Dr. Campins said that his industry is striving to bring technological understanding into the "arts" of plastic bonding. He foresaw the development of the bonding "arts" into the more formal status of an industrial science.

He discussed what he termed the three primary characteristics in bonding techniques: dimensions, deformability and discontinuity. He pointed out that deformability, a tendency to "float" or to "slip," is ever present in plastics. The slip is due to three primary factors: temperature conditions, solvents in the materials and chemical reactions.

He cited as an example of deformability the blistering of the plastic lining of a jar cap due to the creation of a vacuum inside the jar when the contents cool.

He described deformability as "total mobility" and discontinuity as "partial mobility" of the plastic materials involved. As an example of mobility, he mentioned the stretching of the plastic due to compression or squeezing, which results in the migration of the plastic, itself composed of solid particles, in a liquid plasticizer.

He illustrated with charts imperfections in bonding techniques. One of his examples was over-compression during the affixing of laminations which squeezes the plastic bonding or adhesive material and causes ridging.

Dr. Campins pointed out, however, that all these characteristics of plastic bonds are not negative qualities alone, but can be exploited constructively in the design of bonds and adhesives to achieve latent effects. As an example of this, he mentioned the inclusion of dissimilar or antagonistic molecules or particles separated by neutral elements which, when heated, would permit latent activation through flux or coalescence.

Infestation Prevention in Containers—DR. LAURENCE V. BURTON, *executive director, Packaging Institute, Inc., New York.* Satisfactory packaging of food products to protect them from insect infestation throughout their merchantable—or "shelf"—life requires considerably more than a suitable package. It requires also a suitable application of the principles of food technology and factory sanitation.

Here are two fundamental principles that must never be forgotten: (a) no package, however perfect its construction may be, will give satisfactory performance if live insects, or their viable eggs, or larvae, are in the product before it is packaged, except where the container is gas tight and is under a vacuum or is filled with an inert gas that will not support life; (b) no package, however perfect its construction, or however free the product may be from all forms of insect life at the time of packaging, will give a satisfactory performance if the interiors of the empty packages themselves are infested with viable insect eggs before filling, except where the container is gas tight and is under a vacuum or is filled with an inert gas that will not support life.

Many a company has enjoyed a freedom from insect infestation problems that could not be duplicated by another company with the same production methods and packages. How can this be? The difference lies in distribution practices. Where packaged food products are quickly consumed after their manufacture, the time interval may be so short that insect eggs may not have time enough to hatch, or insects may not even have time enough to find their way into a package that would not be a barrier to their entrance.

Outside of open-mesh textiles, there is no packaging *material* through which an insect or its larvae can *crawl*. But there are many materials through which some insects can chew their way. And when they have made a hole it is possible that other insects which lack their chewing or boring ability can also find their way in quest of food, or a place to lay eggs, or to pupate.

Foil tight-wrapped packages are not completely infestation proof, yet they are very satisfactory. Here is the theory: the package is flavor tight to the extent that the insects are not attracted to the food inside the package.

Research is under way to improve further the degree of protection afforded by flexible containers. Some firms are considering the impregnation of the overwrap with materials that repel, discourage or kill insects that attempt to invade the package. Another line of effort is toward the development of carton adhesives that possess similar protective effect. Still another line of attack on the problem

is the development of a multiwall bag in which the outer wall is treated in a manner that will destroy any insect that has the temerity to try to bore through it.

Any procedure involving treatment of a closed package to eliminate insect infestation is rapidly becoming obsolete. While it is, to be sure, better than no treatment at all, it is not what I consider good food technology. Nevertheless, it is done and should be done if there is no other way.

Polyethylene—Its Packaging Uses and Possibilities—CHARLES A. SOUTHWICK, JR., *packaging consultant and technical editor,* MODERN PACKAGING, *New York.* Polyethylene resins can be briefly summarized as being tough, translucent materials, stable and inert at room temperatures and capable of being formed by thermal means. They are also light weight, non-toxic, odorless and tasteless, require no plasticizer or modifying agents, are flexible at low temperatures and can be colored.

The predominant method of forming the resin is by heat alone and this ranges from injection molding and extrusion to hot-resin coating means on paper. Polyethylene resin can be extruded and injection molded without the need of special corrosion-resistant alloys; also the dies have a long operating life. This ability of polyethylene to be heat formed into stable products with a good temperature working range and controlled degrees of orientation is one of its outstanding virtues. It also means that the cost ratio between polyethylene resin and the finished product can be kept to a minimum.

Polyethylene is being injection or compression molded to form caps, covers and lids of a wide range of diameters and types. Because of its ability to deform slightly and its gripping action on glass and many other plastics, very simple plugs and snap-on lids can be made for vials, tubes and bottles of all kinds. These simple closures are vapor tight without liners, easy to open and reclose and are being used in great numbers by drug, pharmaceutical and cosmetic companies.

Screw caps of metal or other plastics can be improved by polyethylene liners of several different types. One means is a polyethylene disk of heavy gauge (at least 30 mil) or a formed supplementary closure to go over the glass finish before the cap is turned into position. Another means is a paper or cork backing with a facing of paper or foil with a surface layer of polyethylene applied as a lamination or as a coating.

All closure means employing polyethylene depend upon its ability to deform and seal to the container finish and to prevent leakage, water-vapor loss and inertness to attack by the contents.

Vials have essentially straight side walls and can be produced by injection molding techniques with perhaps an added step to form threads and finish. Polyethylene vials are thin walled, tough and translucent and are available in a wide range of sizes, styles and finishes.

Bottles of polyethylene are produced by a process and equipment which is similar to that used for glass bottles. The fused resin is blown into the mold which is cooled, opened and the bottle discharged. The bottle finish, not including the threads, is formed by a separate operation, but an annealing step is not necessary. Polyethylene bottles are being made in an ever-increasing range of sizes, styles and colors as a result of the demands of chemical, cosmetic and other users. Many products require a spray for use and the polyethylene bottles with flat sides and a special air-liquid mixer built into the cap make effective atomizers as well as containers. Corrosive and active chemicals are being packaged in polyethylene bottles, the most notable example being hydrofluoric acid, which attacks glass.

Special devices consisting of polyethylene tubes and molded parts are being used as dispensing means for liquid chemicals or incorporated with valve arrangements as closures and spray means for aerosol solutions of insecticides in *pressurized* metal cans.

Polyethylene resins can be applied to paper, cloth and similar fibrous or absorptive bases by a fused-resin technique, by solvent solution or by hot-spray method. When properly applied on a smooth paper, 5 lbs. of resin per 1,000 sq. ft. will give a surface film of about 1 mil and have excellent adhesion to the paper without showing stain. The resulting coated paper is capable of strong heat seals on jaw sealers and has excellent durability and protective qualities.

The heat sealing of unsupported films of polyethylene can be performed to give seals which are as strong and protective as film itself, but such seals require special sealers and technique. The problem of heat sealing is made difficult by the narrow temperature range at which fusion can be accomplished without melting and thinning the section. Also the resin in a fusable condition is low in strength and adherent to hot metal surfaces. Heat sealing can be accomplished with jaw-type units by covering the heated jaw with parting surfaces, with critical control of the temperature and dwell time, with light pressures and by not moving the seal until it has cooled slightly.

The continuous-type sealers that use a moving steel band are ideal for sealing polyethylene film, as are the new so-called impulse sealers.

The resistance of the polyethylene surface to attack is brought out in attempts to print the film. While some polyethylene is being printed in multicolor, the inks will not stand up under rubbing or severe distortion. Unquestionably the problems will be solved by improvements in the ink composition and the printing process.

Polyethylene films are being fabricated into liners for multiwall bags, for fibre and metal drums and for carton and case liners for products ranging from carbon black, corrosive chemicals, synthetic resins and food products both dry and semi-liquid. Small sizes of bags are being used for frozen foods and speciality uses, but limitations in the supply of resin and film have prevented large usage.

At present price trends, polyethylene resin and films are going to possess increasing price advantages. Everyone who is in any way interested in better packaging should take immediate steps to find out how to use this versatile resin and film.

WEDNESDAY MORNING (Concurrent session)

Chairman, PHILIP H. GILBERT, *traffic representative, Isthmian Steamship Co., New York.*

Handling Factors to Consider in Container Design—BURR W. HUPP, *Drake, Startzman, Sheahan, Barclay, Inc., New York.* Many production and warehouse men today are concerned about the high cost of materials handling. And most of the costs they cannot control are traceable to bad packaging. The warehouse cannot dictate what containers the suppliers shall use. When a poorly designed container is received, the warehouse simply has to spend an undue amount of time and effort handling it. As a result, its handling costs remain high. For example, they receive a

wooden box that contains 1,200 large washers and weighs 600 lbs. That box has to be moved from the receiving dock to inspection, then to storage and finally to the packing belt where the washers are repacked in smaller quantities. The box is too big and heavy to be handled manually.

This is an example of a container that is simply not handleable. By a handleable container, he said, he meant one designed so that it can be picked up, carried and set down with a minimum of expense all the way along the chain of distribution—from the producer who puts the product into the container, to the consumer or user who takes it out. Mr. Hupp then listed general problems the warehouseman would like to see solved through improved shipping containers: (1) take account of the handling characteristics of a container when you are designing or writing specifications for it, (2) cooperate with your materials handling engineer or superintendent on container design, (3) consider how the container will be handled not only in your own plant, but all the way down the chain of distribution, (4) remember that packing and packaging operations are themselves very largely materials handling, (5) take account of recent developments and trends in materials handling—more and more materials are being handled mechanically and (6) watch the trend toward pallet-size standardization.

Now let's go on to specific problems. The No. 1 problem raised is the container that is a perfect cube. It is difficult to palletize or stack successfully such a container.

The No. 2 problem is the container that is too weak to be palletized and staked to ceiling height. The container buckles and the stack falls.

The third problem frequently mentioned is the container that will not fit on a pallet of such common sizes as 32 by 40 in., 40 by 48 in., or 48 by 48 in.

Other problems are the container that is too heavy—a package that weighs more than 75 or 100 lbs., may give trouble.

The container that is not full. If there are excessive voids in a carton, there must be more cartons, necessitating the use of more transportation and storage space.

The container that is so inadequate that it breaks open in transit or handling. It is expensive to unload a "bad order" car or to sweep up and recooper a broken box.

The container in which too much packaging material is used. Some shippers could reduce their specifications.

The container of odd shape. Conical, hexagonal and similar containers are apt to be hard to stack and usually take a disproportionate share of storage space.

The container that is not properly marked or identified. It costs us every year because packages are marked in such a way that employees who handle or sort or pick them cannot identify separate items quickly.

The container that could just as well be its own pallet. Good examples are appliances like washing machines and refrigerators. The crate in which these are shipped could easily be built with dunnage strips nailed on the bottom.

Finally, the standard packing quantity. When the standard packing quantity is correctly established and observed by purchasing agents and salesmen, you can pack an entire run at the end of the production line, gaining the advantages of economical packing operations; you can store your product in those containers; you have no repacking.

Savings with the Disposable Pallet—DAVID M. DALY, *traffic manager, Bristol-Myers Co., Hillside, N. J.* Having seen pallet systems work for the Army and Navy during the war, Mr. Daly said, they went to palletization of incoming raw stores and have gradually palletized finished stock storage operation. The latter operation, in addition to eliminating the high in-piling and out-piling, with the multiplicity of handlings attendant, has completely eradicated the rehandling or picking up of case goods prior to shipment, a reduction of over 1,000,000 handlings a year.

The new system contemplated removal of the merchandise from the storage pallets for flooring in boxcars and trailers at time of movement. The next logical question was, "Why not leave the stock on the storage pallets for carload and truckload shipments?" When one considers that approximately 50% of Bristol Myers' outbound volume consists of solid carloads and truckloads, it will be realized that we felt we were on the road to something worth while. However, a cursory investigation of the possibilities open to us forced the conclusion that so long as the railroads assess the same rate for the pallet, by weight, as for the merchandise carried thereon, the use of the conventional wooden pallets in transportation would remain prohibitively expensive. Instead of reducing costs the use of wooden pallets would increase them by 30 to 50% on the Chicago movement, with a greater percentage of increase in movements to our more distant facilities.

The weight factor having disposed of the wooden pallets, the paper or expendable pallet due to its lightness was the only remaining possibility. Now instead of paying freight on 2,000 lbs. of pallets in a shipment to Chicago, we are paying on 200 lbs. Instead of paying $24 we are paying $2.40 in transportation charges and there are no storage or return problems to plague us. If we can make this medium work we can therefore save approximately $20 on every car and realize additional savings on our warehouse handling costs. At this point we decided to tackle the intercoastal movement.

The first of our shipments which went forward intercoastally, moved on the S. S. Ventura of the Isthmian Line. For comparison we moved at the same time, via the same vessel, to the same destination, a practically identical shipment of unpalletized freight. In the following time study, we have designated the palletized shipment as "Load A" and the unpalletized shipment as "Load B." "Load A" weighed 39,795 lbs. and "Load B" 40,135 lbs.

		Average tons per hr.
1.	Loading to trailer at plant	
	Load A—26 min.	45.9
	Load B—2 hrs. and 31 min.	8.388
2.	Unloading trailer at pier	
	Load A—30 min.	39.4
	Load B—2 hrs. and 45 min.	7.65
3.	Loading into vessel	
	Load A—30 min.	39.4
	Load B—60 min.	20.7
4.	Discharging	
	Load A—1 hr. and 1 min.	19.895
	Load B—1 hr. and 54 min.	11.11
5.	Loading to trucks	
	Load A—24 min.	49.737
	Load B—2 hrs. and 23 min.	8.797
6.	Discharging to warehouse	
	Load A—35 min.	33.158
	Load B—2 hrs. and 38 min.	8.121

The foregoing should serve to indicate that the manufacturer or shipper is not the only one who benefits from

the disposable pallet operation and should also indicate where the shipper can expect to realize some of his reductions or savings.

Now let's have a look at the actual costs encountered and the savings possible. The pallets cost $1 each, f.o.b. our plant at Hillside. We load some 2,000 lbs. per pallet. On our unpalletized water shipments we pay a segregation charge of 12 cents per cwt. at destination. Palletization has the effect of completely eliminating segregation and thereby accomplishes a saving of these charges. We have effected a net saving of some 7 cents per cwt. However, the loads in question are glued throughout and carry one band of steel strapping around the top tier of cases. We estimate that the glue and strapping cost is approximately 2 cents per cwt., which effects a further reduction, bringing the saving down to 5 cents per cwt. Our drayman gives us a 5 cents per cwt. reduction on palletized merchandise, so we end up with an over-all reduction of 10 cents per cwt. in our transportation costs.

There is absolutely no question that when combined with the principle of glued loading, the disposable pallet will safely and securely carry any properly proportioned container, the contents of which are packaged in glass, metal or other substances having enough rigidity to retain the solid block effect through switching and handlings. On the less rigid and more compressible items, there are still bugs to be ironed out. The worst problem in moving so-called compressible items on paper pallets is the tendency of the load to sag between the posts, causing the post to thrust upward and crush the bottom tier of cases.

Problems of the Receiver in Intra-Plant Shipments—R. F. WEBER, *International Harvester Co., Chicago, Ill.* When we consider that every item used in production must be handled many times, that it must be packaged and in all cases it must be loaded, we realize the potentialities in the fields of materials handling, packaging and loading. The objective of any materials handling operation is to transport materials in the shortest possible time with the least expenditure of money and energy for maximum production efficiency. By efficient materials handling we may accomplish these objectives: (1) reduction of handling costs; (2) economy of warehouse and storage space; (3) reduction of inventory; (4) reduction of accidents to men and materials; (5) reduction of loss and damage complaints; (6) shorter production cycle; (7) promote sales appeal and (8) develop better industrial relations.

The first step in a program of intra-plant shipments is for the receiving works to determine by what method the incoming parts are to be handled—whether on pallets and pallet boxes, on skids, in racks, in bundles or in packages, or arranging unit load to eliminate need of pallets; in what quantity per unit, and weight and size limitations; shall the method be developed in the plants involved, or with the assistance of materials handling research. We have a standard 42 by 42-in. pallet and pallet box for all manufacturing operations and this size and style is used wherever feasible, from the collateral plants or suppliers.

The second step is to contact the suppliers and collateral plants for acceptance of the proposed method. If a different practice is recommended that might better fit into the suppliers' picture, the necessary changes are made.

The third step deals with the suppliers' or collateral plants' equipment for economical-handling unit loads, also their physical facilities to transport and load these units.

The fourth step is the handling in the receiving plant from car or truck to intermediate storage or directly to production lines. Most of the finished incoming materials are delivered to intermediate storage with lift trucks and air rights are used to the greatest advantage for economy of floor space. When parts can be received on a definite daily schedule, synchronizing with production, the units are delivered by fork truck to stations along the lines.

The fifth step is a review of the handling equipment necessary for more economical unloading, handling and stacking of incoming palletized units.

The sixth step gives consideration to training of personnel in handling of materials, both in the suppliers' and collateral plants, as well as in the receiving plants.

The seventh step relates to safety in all of these handling operations. The majority of industrial accidents are the result of improper or careless handling practices.

WEDNESDAY AFTERNOON

Packaging and Packing for Successful Shipping—*Panel discussion.*

Chairman, J. D. MALCOLMSON, *AMA vice president in charge of packaging division and technical advisor of Robert Gair Co., Inc., New York.*

Export: J. GARDNER CROWELL, *packing and crating engineer, Philco Corp., Philadelphia, Pa.* Mr. Crowell outlined his company's method of approach in drawing up packing specifications for their refrigerator line. Prewar, he said, they used a rigid crate, but now have changed over to the semi-floating method by which shipping shocks are absorbed by rubber washers, corner cushion pads, cellulose wadding and corrugated pads. The outside container is a three-ply crate of laminated wood, the base of which also serves as a skid, being constructed so as to permit the use of a fork truck.

Inside the refrigerator, parts are carefully insulated against shock by the use of pads of cellulose wadding and wedges of corrugated, all held by pressure-sensitive tape.

Mr. Crowell said that the company uses various tests to determine the adequacy of the protective qualities of their pack, but they place their chief reliance on the Conbur inclined-impact test and the vibration test. They provide for proper nailing by means of a diagram showing the place for every nail and they use steel strapping for their final outside protection.

The company has worked closely with their marine underwriters in checking causes and extent of damages to shipments, according to Mr. Crowell. They endeavor to reduce to a minimum the need for such directions as "this side up," "use no hooks," etc., on the theory that freight handlers don't pay too much attention to them anyway.

To point up his talk, Mr. Crowell then demonstrated in reverse how their export refrigerator pack was applied. The steel strapping was removed first, then the panels of the shipping crate—attention being called to the possibility of using a fork truck on the base—and the audience was invited to inspect the pack after the meeting was adjourned, to observe how the protective pads and cushions were used.

Bulk Products—T. P. CALLAHAN, *supervisor of containers, Monsanto Chemical Co., Springfield, Mass.* Taking safety as our prime requirement in the development of all packaging within the chemical industry, we have continually fol-

lowed a pattern which embraces three fundamentals necessary for successful packaging—safety, economy and appearance.

I do not think there is any question but what the multiwall paper bag is the most economical package from a cost standpoint that can be used for units up to 100 lbs. net. It has the advantage not only of low container cost, but also low freight cost. Improvements in the strength and the various linings which have been applied to multiwall paper bags make them very desirable containers for a great number of dry powdered products.

The fibre drum is a rigid container which lends itself as an excellent container for chemical products. The fibre drum industry has done a remarkable job in the development of this type of package and through extensive research has developed a long list of linings and coatings which have been applied to the interior of these drums for particular protection to particular products. Being a rigid container and constructed of strengths to meet the customer's requirements, these containers are built to hold larger units of material and at the present time are satisfactory for shipments up to 400 lbs. A universal package for the shipment of bulk liquids has been the 18-gauge, 55-gal. steel drum and this, we feel, will continue to be the safest and most economical package for this form of packing and shipping. There is a trend towards shipping of materials in larger units than the conventional bulk packages. This particularly applies to the shipments of liquids in tank cars, or dry products in bulk container cars, hopper cars, or in some instances ordinary freight cars.

Heavy Products—JEROME F. GOULD, *president, Acorn Packaging & Packing Corp., New York.* It has been estimated that losses in our exports due to improper packing in 1947 amounted to from 750 million to a billion dollars. It is estimated that in 1948 a like amount of loss was suffered. As a result of this tremendously high loss level due to improper packaging a considerable protest has been raised by various interested people throughout the country.

About a year ago, Mr. Gould said, he was in touch with Senator Irving M. Ives of New York, who was a member of a Senate sub-committee which was to undertake an investigation into the Office of International Trade. It was his thought that this committee should determine why the O.I.T. had not given proper attention to the export packing problem, particularly in the face of the European Recovery Program, which had just then gotten under way. In September of 1948, Ralph Hallett, chief of the Office of Regulation of the U. S. Maritime Commission, addressed some 53 export steamship conferences, asking members to set up a voluntary uniform system of standards.

The next step in this export packaging merry-go-round was taken by the O.I.T. themselves. It consisted of a plan to call together 30 business men and federal export trade experts to join a committee to tackle the packing problem. In the event that other courses of action failed, it was intended that the government establish regulations with compulsory standards.

The hue and cry which followed on this public announcement was swiftly translated into action. James A. Farrell, president of the Maritime Assn. of the Port of New York, called a mass meeting on the floor of the Maritime Exchange in New York on Feb. 2. The purpose of this mass meeting was to "organize an educational campaign to combat the staggering losses experienced by steamship companies and underwriters. To date the following has been accomplished: A competent engineer has been engaged to make a survey of the problem. This survey will consist of a detailed check of shipments' packing condition and handling methods used in general cargo movement on two ships departing from New York in each of 10 foreign trade routes. The same procedure will take place at destination. It is expected that the survey will take six months, during which we can anticipate a further loss due to improper packaging, which we can estimate, according to past experience, will conceivably amount to $\frac{1}{2}$ billion dollars. Time is running short in Europe. We cannot afford waste and delay.

I suggest that a thousand times the expense of the survey could be saved while the survey is being conducted. The time to act today!

Container Quality Measurement—E. H. BALKEMA, *purchasing department, Colgate-Palmolive-Peet Co., Jersey City, N. J.* Changes in our thinking during the past war and in the years that followed, as well as changes in transportation, handling and merchandising methods, have contributed to a changed viewpoint on the part of the buyers of shipping cases. The trend has been very definitely toward more efficient cases of light weight and low costs.

There are, however, certain restrictions placed upon both the manufacturer and the buyer, such a Rule 41 which provides, for example, a Mullen test. In my opinion, the Mullen tests of the board bear no direct relationship to the ability of the case to withstand rough handling and properly protect its contents except in the case of cans or other similar merchandise. In our experience, Mr. Balkema said, compression tests have proved to be most practical.

What type of test is best for you? That is your problem and most probably will require considerable study on your part. If you are one of the big companies and you have your own testing facilities, you probably have a testing procedure which is similar to ours and you are not experiencing too many difficulties.

If, however, you are one of the companies which does not have its own testing facilities, then you may be in trouble. Assuming that you have adequate written specifications, you can follow one of two courses of action: (1) insist that your supplier make tests on your cases and submit the detailed reports to you or (2) send samples of your cases to a commercial laboratory and have them tested against the written specifications. This suggested program is simple and direct. It is easy to follow and will pay big dividends.

After such a suggested program has been installed and you see the results obtained, it is my belief that most of you will agree with me that compression testing and or some other test which will properly reflect the carrying capacity of your corrugated cases is essential.

Container Performance Standards: E. S. PETZE, *staff materials control engineer, Scott Paper Co., Chester, Pa.* Our specific application of "performance standards" to shipping containers, said Mr. Petze, may be looked upon as a new approach for our particular type of products. However, a similar method of measurement evaluation has been used by soap manufacturers; the glass industry has determined the drop test to be the most significant criterion and the Porcelain Enamel Institute has recommended the Conbur and L.A.B. vibrator. We have not confined our testing to compression alone, but so far it seems to be one of the most pertinent single tests for our commodities.

Essentially, we might say that the function of control is the husbanding of necessary characteristics. Experience has shown that we must determine use requirements of individual items of supply; develop testing procedures to measure use requirements numerically; establish procedures for acceptance sampling of supplies purchased on specifications; calculate tolerance limits for supplier guidance to maintain their processes within our operating limits and program research in new materials and designs.

As a pattern for approaching an individual company situation, Mr. Petze suggested, (1) pick out the most urgent problem, (2) get reliable information on the conditions surrounding that problem and (3) be sure you have the whole story. This means collecting, condensing and presenting data.

Irregular Shapes—W. GORDON BENNETT, *manager of packaging, Anaconda Copper Mining Co., New York.* Most industries approach their packaging problems knowing that their final result will be either a square, a rectangle or a circular container which will be designed to contain one or several units. These fortunate people can arrive at standard specifications for their end-use packaging containers. In our company, Mr. Bennett said, we have for years had standard practices for shipping our material to our customers in cases, crates, wirebounds and returnable containers with maximum weights of 500 lbs. But when lumber went from $30 to $90 per M ft. and when labor rates tripled and freight rates increased 65%, we realized that to stay in business it would be necessary to reduce our packaging costs and tare weights considerably. This was accomplished in the high six-figure bracket.

Mr. Bennett cited the case of a customer who insisted that material be shipped in wood cases, maximum weight 350 lbs. After several months and considerable correspondence between the sales department and the customer's purchasing agent, we were finally allowed to visit the customer's plant. Our precious metal in 350-lb. cases was shoved off the end of a truck down a coal chute and bounced off of a burlap bag full of waste cotton. From there it was handled by hand truck to a storage area.

After studying the problem we found they did not have a fork lift truck and could see no reason to own one. We persuaded them to borrow one for an experiment. Then we estimated the amount of metal needed at their machine operation based on an 8-hr. shift.

The result: A skid slightly irregular in shape that carried 3,800 lbs. of material, taken off the truck and placed in receiving area, moved to the machine of operation and straps cut produced enough material to operate that particular machine for a full 8-hr. shift. The skid cost us $2.50, the cases $4.50 each. Ten cases at $45., one skid at $2.50. Who won? . . . We both did. The results are apparent.

THURSDAY MORNING

Chairman, P. J. LATHROP, *executive vice president, Cameron Machine Co., Brooklyn, N. Y.*

Profitable Development of Automatic Machinery—GEORGE M. WOODRUFF, *manager, Machinery Development Division, General Foods Corp., Battle Creek, Mich.* As a starting point it is well to make a plant survey of existing machine manufacturers to determine what they may have to accomplish the job using standard equipment. Standard machines, if they can be used, will always prove to be far more economical and will contain far fewer difficulties than any new machinery which might be developed, according to Mr. Woodruff.

When standard machines do not meet the requirements, the second consideration should be given to having machinery manufacturers modify their standard equipment if this can be done to give the desired results. There are two reasons for this: any manufacturer has acquired considerable machine experience in the particular field of his class of machinery and development of new machines takes time with all of the testing and proving to be done.

Where standard machines or some modification of them do not fulfill requirements then consideration can be given to the design and development of special machinery. This can be handled thus: (1) the user may employ an established machine manufacturer experienced in closely related equipment to design and build the machines or (2) he may employ a special machine designer and builder or (3) the user may design and build the equipment with his own staff.

The development of new machinery or equipment goes through some very definite stages whether it be done by the user himself or by one or the other of the above outside sources. Stage 1 is the clear framing of the requirement picture or collection of data on the amount of labor which might be saved, machine cost both for the initial unit and for any subsequent machines, the operations to be performed and the end result of the product, floor space available with capacity requirements and the materials.

Stage 2 is the conception period, the consolidation of ideas or the hatching period. At this point the designer begins to evolve his concept of what the machine or equipment may be like. Stage 3 is the model evolution or proof of basic elements of machine operations. Stage 4 is the designing and detailing of the finished machine. The designer will take all of the original data and known facts he has plus all of the facts established by the experimental models and design all these into a completed unit, down to the last detailed drawing to get an accurate cost estimate.

Stage 5 is the machine fabrication, assembly and shop testing. Experience has shown that it is not necessary for the machine user to have a large or complete shop for building newly developed machines.

Stage 6 is the actual machine installation and follow-up in the field or production line. From past history it does not seem possible to shop test new machines to the extent that they can reach the factory and give no further trouble.

Reducing Costs Through Flexibility in Production—NED DRUCKER, *manager of engineering, Schenley Distilleries, Inc., Cincinnati, Ohio.* Mr. Drucker pointed out that to the engineer and production man, there are many ways to cut costs. We can pick the materials and methods by which a superior package can be presented and at the same time we can obtain maximum use of production facilities. Unfortunately for the man responsible for production the problem does not end simply. The difficulty in achieving flexibility of production lies in the rigidity caused by the greater mechanization, higher speeds and closer tolerances. Flexibility can be obtained only by establishing specific balances which at each point compensate for what might be called production inertia. These balances or prerequisites can be grouped into four classifications: machine and attachment design, training of personnel, plant layout and handling methods and scheduling.

First, each machine must be designed so that it will do its

job well. In purchasing our own equipment, we choose the individual units on the following characteristics: (1) ability to do the job well, (2) speed of production, (3) flexibility—the ability to change from one package to another rapidly with a minimum of attachments and (4) ease in maintenance. Using these factors, you will probably find a number of machines on the market which can do the job. However, it is important to standardize on one machine only for each operation. If 100% standardization is not realized, the amount of deviation should be minimized and non-standard units should be segregated.

Automatic feeds and discharges should be utilized on machines. This eliminates a potential bottleneck in the ability of the operator to handle the package, but it also, permits synchronizing a group of equipment, all of which must handle the same package in sequence. In an arrangement of this type, it becomes necessary for each machine to be equipped with attachments to handle every package which will be produced on the line.

We find that ease of set-up with special attachments is more a fallacy than a fact, since tolerances in packaging supplies quite often require the mechanic to make adjustments not originally provided for. For these reasons we have designed universal attachments for each machine. We have classified into size groups the entire range of products to be handled; for each of these groups, we established the maximum and minimum for each dimension. We then designed primary attachments to be changed only under extreme circumstances and each of these primary attachments has a range of adjustments. Onto these primary attachments we added standard secondary attachments for each classification, which could rapidly be changed. With this universal attachment design, many changes require only a thread adjustment and few require more than a quick addition of standard parts. We found that we could provide or make a set for any machine at a cost equivalent to two sets of standard attachments.

No matter what your own packaging problem may be, how many or few machines you have, it is worth while to get some program down in black and white. Manuals printed for each machine clearly outline the sequence of steps to be observed in both overhauling and setting up the machine and the tolerance to be allowed at each point. On the basis of these manuals, a training program was started for all mechanics.

It is very easy to concentrate on conveyors or pallets and to forget the over-all picture of department arrangement. In every plant there is a certain amount of marginal space which might be put to better use and there are certain non-operating departments which might be placed some place else. Quite often it may pay to rent outside space for the storage of items with a low turnover in order to clean up your active in-plant space so that fast moving materials are where you want them at the time you want them. There is one other possibility—on the faster moving items, your supplier may be willing to trade storage for you, for freedom of scheduling on his own part. It is a fair trade where you gain storage space, rapid delivery, lower inventories and less handling and he gains regularity in production and sufficiently lower costs to compensate for his handling problems.

As stated previously, physical arrangements are a prerequisite in obtaining flexibility in the packaging field. However, no physical change will achieve the end required unless your program includes a scheduling procedure that adequately controls your production.

Getting the Most Out of Machinery for Films—WALTER FARRELLY, *packaging supervisor, Cellophane Division, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.* Efficient machine operation depends on close attention to detail, Mr. Farrelly said, as his preface to enumerating specific points. Concerning storage, he said, some films depend to some degree for their strength and flexibility on moisture absorbed within the sheet. Most of these reach ideal moisture equilibrium at a temperature of from 60 to 70 deg. F. and relative humidity of 40 to 50%. If you can't air condition, store in the coolest dry place you can find. Strong sunlight is another hazard to be guarded against.

Some operations—candy manufacturing, for instance—require room conditions almost ideal for films. In this case the film should be conditioned in this room for at least 24 hrs. before using. Where processing operations require that air be extremely humid, make sure that no extra rolls are stored in the room. Rooms which house printing and fabricating operations should be completely air conditioned.

Other suggestions Mr. Farrelly offered for more efficient use of films included: (1) If your automatic wrapping machine is not equipped with side plates or disks that fit snugly against the roll ends to prevent telescoping of the film roll, your own mechanic can easily make some. (2) Some form of slack take-up device is required on high-speed machines which use intermittent motion for feed. (3) Most modern wrapping machines for handling thin films have a corrugating device built into them. A properly adjusted corrugating device will double or triple the distance a thin film can be pushed without buckling. Another device is an air jet. (4) At low relative humidities, static will give trouble with all films except those that are electrical conductors. A small vaporizer will be helpful. Static eliminators are also available. (5) Knives of the shear type, either rotary or oscillating, give best performance for cutting single strips of the thinner films. (6) With few exceptions, the single or non-supported films of thermoplastic polymers cannot be slid across the sealing plate without some support. Either an oscillating or rotating type of sealing plate must be used or some other support such as a slip sheet or metal belt. (7) Sticking and excessive dragging in heat sealing of both the coated and the plastic types of films can be minimized by various coatings or coverings on sealing plates. The silcones, the oils, greases and resins have proved effective in many cases. (8) The growing use of positive carry-through for each package on newer machines is eliminating damage caused by stopping the package on the sealing plate. Some manufacturers have provided automatic retractors so that the sealing plates cannot remain in contact with the package when the machine is stopped. (9) If machines use two or more types of film on the same day, start out using the film which leaves the least deposit, if possible, to minimize cleaning during the day. (10) Heat-sealing devices are the most widely used of all closing devices for bags made of heat-sealing films. For maximum strength, use a type with the serrations running at right angles to the seal. For maximum air-tightness, but not strength, use serrations running parallel with the seal and, for the ultimate in both, a combination of both. A method for sealing thermoplastic films by means of a hot wire or electrode stretched over the sealing jaws has been perfected and patented. Electronic sealers have recently been found useful for sealing the thermoplastic films.

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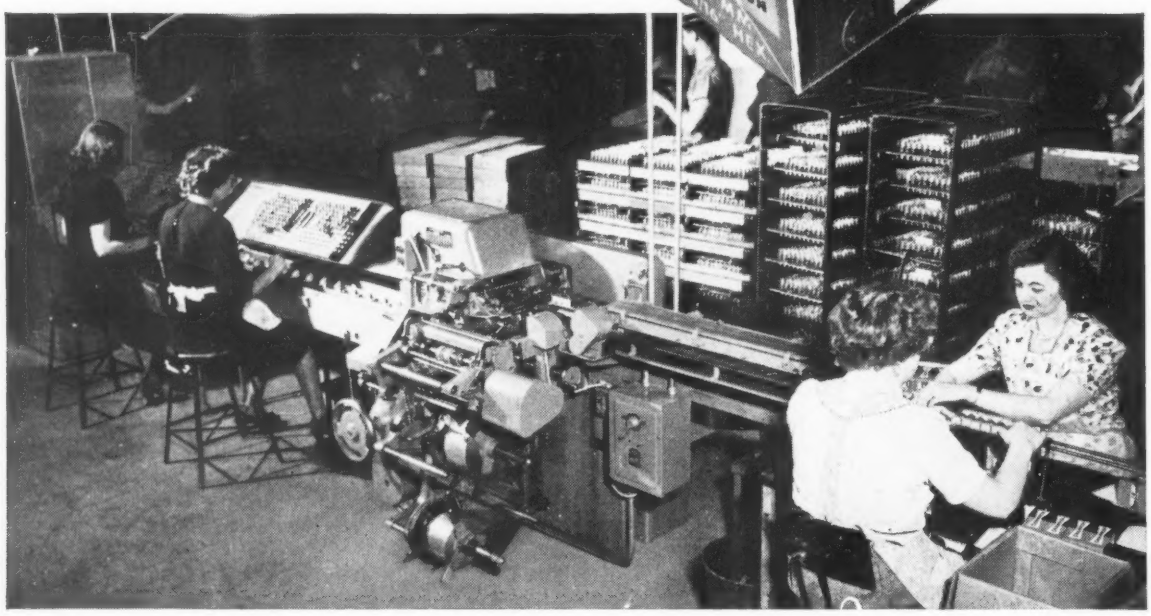

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Future of plastic films*

A REVIEW OF THEIR PRESENT POSITION IN PACKAGING AND AN EXAMINATION OF THEIR POTENTIALITIES AS YET UNREALIZED

By M. R. Gerow†

In reviewing the growth of plastic films in the rapidly changing field of packaging, an attempt must be made to bring together, for the sake of discussion, figures and facts concerning raw materials and their compounds, methods of production of films, equipment for the use of films, formulations and the various fields in which they are being consumed and possible developments for the future. This review will cover films under 5 mils, as anything above that is generally classed as rigid sheet.[1]

One of the principal questions is the ability of the film producers to formulate films with specific properties for specific end uses. This means a great deal to industry and to the packaging field.

Volume of production

The estimated production for 1948 of all plastic resins and cellulose products (including cellophane) was one billion pounds. It is difficult to separate the film produced in 1948 because of the large expansion of film-producing facilities during the year.

To draw a comparison against this figure of one billion pounds of all plastic materials produced in 1948 and because of the tremendous increase in the production capacity for films, a figure has been estimated which will indicate the film industry's capacity for 1949. For films under 5 mils this totals 351,720,000 lbs.

While cellophane generally is not classed as a plastic film, it lends its tremendous weight and affects the future of many plastic films.

The figures for nitrocellulose are almost entirely for motion picture film. Today the motion picture industry is also printing a percentage of its release requirements on cellulose acetate.

This chart shows estimated 1949 production capacity for each individual type:

Cellophane	220,000,000 lbs.
Vinyl chloride and copolymers	45,000,000 lbs.
Polyethylene	45,000,000 lbs.
Nitrocellulose	22,000,000 lbs.
Cellulose acetate	10,000,000 lbs.
Rubber hydrochloride (Pliofilm)	9,000,000 lbs.
Ethyl cellulose	600,000 lbs.
Polyvinyl alcohol	120,000 lbs.
Saran	— lbs.[2]
Polystyrene	— lbs.[2]
Total	351,720,000 lbs.

Promising newer films

The spiraling of the vinyls and polyethylenes to volume status can be attributed to their functional values being utilized as their prices dropped into useful ranges. Not all of this film is being used in packaging by any means. The majority of vinyls have been used in the consumer soft-goods industry, whereas polyethylene has made its mark not only in that field, but in wire coating and in injection-molded objects.

Rubber hydrochloride has had excellent merchandising, similar to that of cellophane. Its main volume field has been packaging, although it is still relatively a little high-priced.

Ethyl cellulose is a high-priced film now, but can be a "sleeper" for the packaging field. It has some very interesting properties and probably could expand even at its present price.

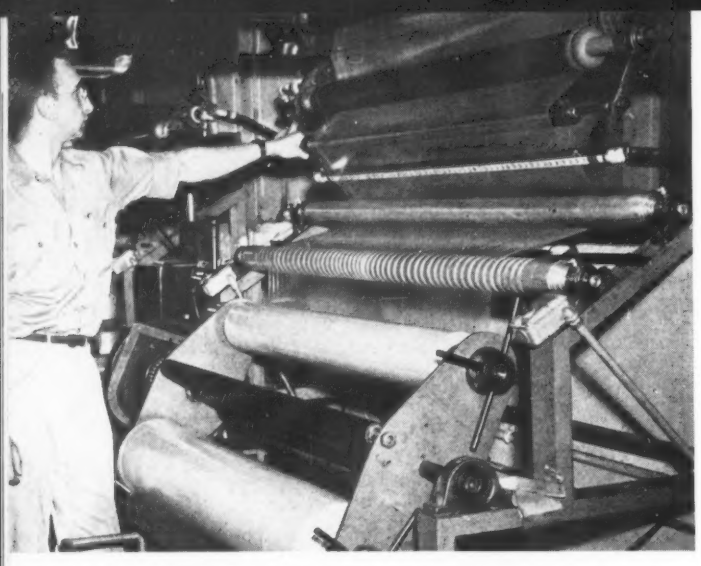
PVA came of age during 1948 when it was produced on commercial equipment. Its unique properties are

* Adapted from a paper under the title of "Plastic Films" delivered by the same author before the Fifth Technical Conference of the Society of Plastics Engineers, Inc., Philadelphia, Jan. 19 to 21, 1949.

†Product Manager, Plastics Division, Reynolds Metals Co., New York.

[1] Three mils is also commonly used as the division point between film and sheet.

[2] Figures for saran and polystyrene not available.



FILM COMING OFF a casting machine with a double winding attachment. This is polyethylene film which, when it is produced by the casting method, has a lower water-vapor transmission rate than the same material extruded. It can now be produced in gauges as low as 1 mil.

being utilized mainly for polarized materials and on vacuum-bag molding, particularly polyesters, although it has possibilities in packaging.

Saran (polyvinylidene chloride) and polystyrene films are still in small supply, but very interesting.

It is well to point out that all of these developments followed a good many years of research before final production was actually commenced.

From the figure given on the capacity for producing film in 1949, it can be established that the procedure of manufacturing plastic film has progressed very steadily to the point where the newer raw materials now being produced experimentally can rapidly be changed over into production items and evaluated for their markets.

In Table I, there are listed 33 different resins which have either been made in the form of film or which show promise for the future as film-forming materials. Those materials which have established their usefulness as films are numbered 1 to 16, 19, 20 and 22. All of the other resins listed are still in a preliminary stage, some of them quite uncertain as to their potentialities. The voids in the data, particularly on the last mentioned group, are due to the amount of research work still to be accomplished.

Possibilities in special formulations

In addition to the present large film markets—such as moving picture film, transparent packaging, pressure-sensitive tape, consumer items, etc.—many large potential markets exist for films not now formulated. The ability to formulate for special end uses is becoming the clue to the future expansion of the film industry.

It is true that in most cases today, the plastic films offered to the markets are termed standard films and it is no secret as to most of their formulations. However, it should be pointed out that where an industry or consumer wishes to use the properties of films in place of or in conjunction with other materials, special formulations can be developed to fit his specific needs, within certain limitations.

Special film formulations are available which are highly superior with respect to any one property, such as flame resistance, cold resistance, heat sealability, water absorption, WVT rate, heat resistance, light resistance, solvent resistance, etc. Up to this time, these superior properties have generally been obtained at the expense of some of the other properties. How-

TABLE I—RESINS USED IN FILM MANUFACTURE OR CONSIDERED TO HAVE POSSIBILITIES

No.	*Resin*	*Trade names*
1	Cellophane	.....
2	Cellulose acetate	Kodapak I Lumarith Inceloid A
3	Cellulose acetate, high acetyl	.....
4	Cellulose acetate butyrate	Kodapak II
5	Cellulose acetate propionate	Tenite III
6	Cellulose propionate	Forticel
7	Cellulose nitrate	Celluloid Inceloid N
8	Ethyl cellulose	Ethocel Inceloid E
9	Polyvinyl chloride and vinyl chloride copolymers, rigid	Vinylite
10	Polyvinyl chloride and vinyl chloride copolymers, non-rigid	Vinylite Syntilon Surcoflex Reynolon 2,000 Reynolon 3,000 Plastovin Krene Alphafilm
11	Polyvinylidene chloride-type	Saran Cry-O-Vac
12	Polyvinyl butyral, rigid	.....
13	Polyvinyl butyral, non-rigid	.....
14	Polyvinyl alcohol, unplasticized	.....
15	Polyvinyl alcohol, plasticized	Reynolon 4,001 Surcotube Fabrilux
16	Polyethylene	Reynolon 1,000 Visqueen Polythene Plaxpak
17	Polytetrafluoroethylene	Teflon
18	Polychlorotrifluoroethylene	Kel F Trithene
19	Rubber hydrochloride	Pliofilm
20	Vinyl, Buna N	Visten Hycar
21	Polyvinyl carbazole	Polectron
22	Polystyrene	Polyflex
23	Nylon	FM-3,001
24	Nylon, flexible type	FM-6,501
25	Hydroxyethyl cellulose	Cellosize
26	Carboxymethyl cellulose	CMC
27	Methyl cellulose	Methocel
28	Benzyl cellulose	.....
29	Acrylic	.....
30	Polyvinyl alkyl ethers	.....
31	Polyacrylonitrile	.....
32	Styrene, isobutylene copolymers	S-Polymer
33	Parlon, Buna N	.....

ever, indications are that the loss of other valuable properties can, in many cases, be reduced or forestalled through the use of the newer modifiers for film formers now entering the picture.

As an example, until recently the modifiers for vinyl chloride have generally been chemical plasticizers such as dioctyl phthalate; whereas recently, in order to meet certain Government requirements and for use in particular fields where dioctyl phthalate or its chemical cousins are not suitable, other modifiers have been selected in the soft-resin field and today we have seen the advent of the use of synthetic rubbers and polyester resins as modifiers. This trend to modify film formers with other than conventional chemicals will, of course, expand and will give the plastic film industry a tremendous growth toward a specialized film industry.

Methods of manufacture

The various members of our most important machinery group, as well as film producers, have been hard at work to improve the methods of manufacture of films. Today industry has a choice of: (1) the casting method, from a solvent, latex, plastisol or organosol-type base, (2) the dry or wet extrusion methods and (3) the calendering method. As time progresses, many of these methods will, no doubt, be combined to provide further reduction in costs or to obtain better films.

It is generally conceded that casting gives better uniformity of gauge and greater clarity than either the extrusion or calendering methods. With regard to the extrusion or calendering methods, however, it is, of course, assumed that costs will be lower, as these methods are in most cases performed without the use of solvents. The casting method has greater flexibility as to formulation and can be considered to give slightly better physical properties per mil of thickness. Table II gives a comparison between the same film in 0.004-gauge calendered and 0.002-gauge cast form.

TABLE II—COMPARISON OF PROPERTIES OF CALENDERED AND CAST FILM

	0.004	*0.002*	
	Calendered film	*Cast film*	
		Regular	*Transparent*
Tensile #/sq. in.			
MD	2,250		
TD	2,350	3,000/3,600	3,600/4,400
% Elongation			
MD	200		
TD	350	270/370	270/350
100% Modulus			
MD	2,050		
TD	1,370	2,000/2,500	2,000/2,200
Tear (Elmendorf)			
MD	92	260/300	
TD	68	340/700	350/460

All companies producing film are, of course, continually experimenting with improvements in equipment and some companies that normally cast their films are now extruding and obtaining very good transparency by this method.

It should be noted that the same formulation of film when produced by different methods can have varying characteristics, particularly as to physical properties. In Table III is a comparison of the water-vapor transmission rates of extruded polyethylene vs. cast polyethylene.

TABLE III—WVT RATES OF POLYETHYLENE FILMS

	*WVT rate (average)**	
Thickness	*Cast*	*Extruded*
0.001″	0.70	0.90
0.0015″	0.51	0.75
0.002″	0.38	0.60
0.003″	0.26	0.44
0.004″	0.20	0.34
0.005″	0.14	0.27

* Grams/100 sq. in./24 hrs. at 100 deg. F. and 95% R. H.

It can readily be seen that the cast polyethylene film does have a much lower water-vapor transmission rate. Cast polyethylene film is also much more nearly transparent than the extruded films now produced. Another difference in the two films is the percentage of elongation, in that the cast film has a much higher value on elongation in all directions as compared to the extruded film. Therefore, another factor in comparing films should be the method of manufacturing to see if any of the values that we are attempting to obtain can be improved upon.

Equipment for packaging

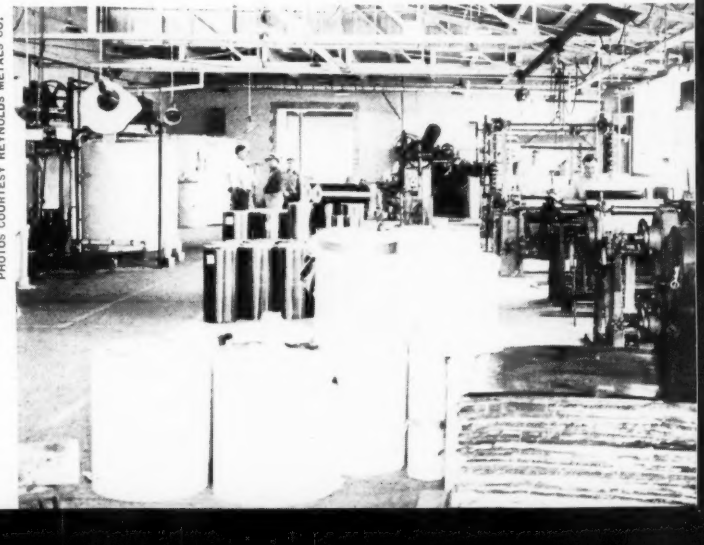
At the beginning of World War II the equipment for handling films in packaging was generally of such a nature that only the stiffer films, with low elongation qualities—such as cellophane—could be readily handled and sealed.

However, during World War II the development of other films, particularly the vinyls and polyethylenes, created a demand for equipment that would handle these softer, more extensible films, as well as a crying need for means of sealing these films.

The machine industry, as a whole, responded very quickly to the request for new methods of sealing, which

CUTTING ROOM in Reynolds' Gary film division, showing production of polyethylene film. Rolls of scrim, used for laminating in certain protective structures, are seen in foreground.

PHOTOS COURTESY REYNOLDS METALS CO.



has shown up in the developments of electronic sealing. However, this new type of sealing is not, at the present time, entirely satisfactory on a commercial basis. The cost of this equipment is usually high. Excluding the work on sealing technique, the machine people as a whole have not accepted the fact that the softer films will be required for the new markets now being developed and have not produced equipment, as of this date, that will in all respects satisfactorily handle the newer and softer films.

In fairness to the machine industry, it should be noted that many of their difficulties have centered in the sealing-equipment category and the work they have done during 1948 will probably result in the production of machines that will handle the new films in a more satisfactory manner. The impact of new developments in the handling and sealing of the softer films can be expected during 1949. One development will be equipment to further the use of vacuum packing with film[3] and another will be a new type of electronic heat sealing known as "impulse sealing."[4]

New emphasis on function

In the packaging field prior to 1948, the emphasis in film had been on beauty and transparency. In line with this, it was only natural that low-cost cellophane should lead the market, followed by other films that have similar physical characteristics—that is, relative ease of handling on present equipment—such as Pliofilm and cellulose acetate.

During World War II a great deal of emphasis was placed on films for their functional value, disregarding beauty and transparency. Many items were developed in the film market that had these functional values and, of course, cost at that time could be largely disregarded. This period of development has left its mark on the plastic film industry and has shown the way for uses of other film materials in the packaging field.

We therefore have today such new types of transparent films as cast polyethylene, cast vinyls, semi-transparent or matte-finished films of extruded polyethylene and calendered vinyls. Each of these different methods of manufacture permits some variations in the film properties and the preliminary evaluations of the films now being produced show that the special characteristics of each film warrants its method of manufacture. Their expansion into the packaging field has mainly to wait for handling equipment adaptable to their softer, more extensible nature.

One-mil transparent polyethylene, when automatic equipment is available for handling it, will be a contender for the water-vaporproof, low-temperature, chemically resistant and light-stable field. One reason for stressing that additional equipment is needed for this field is that fact that the greatest degree of transparency to date in polyethylene has been obtained by the casting method of manufacture. But cast polyethylene is not oriented and this film has an elongation in all directions between 600 and 800%. From this statement alone it can be seen that present machinery for making packages that would pull or push the film would not be suitable for handling this otherwise very desirable film.

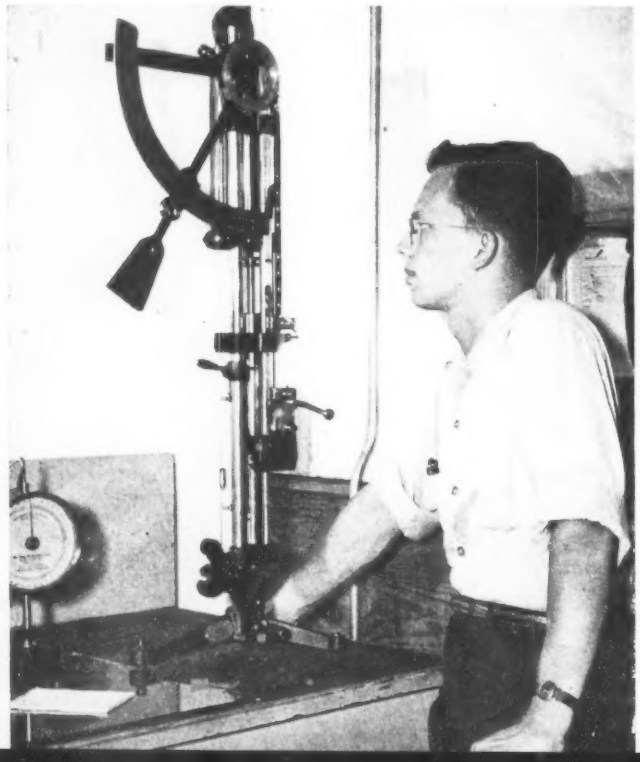
Acceptance of the newer plastic films has been given tremendous impetus by the adoption by the oleomargarine field of the "squeeze-color" pack manufactured from modified vinyl film. In all instances the films now supplied for this product had to have specific physical characteristics—free from the conventional chemical plasticizers and, to general knowledge, all of them are manufactured with either a soft resin or a plasticizing resin modifier.

We feel that the use of vinyls in the packaging field will be expanded by the new cast transparent vinyl films which contain the plasticizing resin modifiers. They have properties of excellent grease resistance, good light stability and toughness, plus heat sealability. Their cost, as of this date, is a little on the high side compared with some of the other current films, but in functional applications, the vinyls have their place.

A very definite mention must be made of cellulose acetate and its growth in the packaging of tomatoes and like products, due to its ability to breathe. We will hear more about this film for packaging as we proceed. It is realized that the packaging of fresh fruits and produce is a problem that has not yet been fully answered except in individual cases. Each produce item has its own characteristics and evolves carbon dioxide at different rates and also must absorb oxygen from the air at different rates. To date, the film that gives the best breathing (*Continued on page 189*)

[3] See MODERN PACKAGING, April, 1949, p. 168.
[4] See MODERN PACKAGING, April, 1949, p. 181.

PROPERTIES desired for any specific application can be built into the new types of film by modifications of the formula. This photograph shows a tensile test on a sample of the film.



Selecting the closure liner

A REVIEW OF THE WHOLE RANGE OF AVAILABLE MATERIALS, WITH EMPHASIS ON THE NEWER DEVELOPMENTS IN COATINGS AND FILMS. By Tracy Cowen*

With World War II several years behind us, it is now possible to procure practically all of the popular closure-liner materials with the exception of pure tin foil, which is still in very short supply and permitted only in closures for packaging medicinals, pharmaceuticals and biological preparations containing chloroform or other highly volatile chemicals for which other types of liners are not suitable.

However, it can be quite safely stated that due to outstanding developments in the field of synthetic resinous coatings and films for liner facings, tin foil has not been seriously missed. The newest liner materials resulting from these developments are polyethylene resin calendered onto paper, polyethylene extruded film laminated to paper with a thermoplastic adhesive, saran resin coatings applied to paper both from solvent and emulsion, and saran extruded film laminated to paper with a thermoplastic adhesive. The above-mentioned liner materials will be discussed in more detail later on in the article.

There are five principal types or classifications of liner materials which cover all products sealed in glass containers and the facings that fall in each classification are discussed in the following paragraphs.

Metallic foils

Tin foil, which is in this classification, has already been discussed.

Aluminum foil is used in reasonably large quantities as a spot material with gutta-percha backing in metal crowns for sealing beer and the like. In addition, when duplexed to a suitable backing it is used in regular continuous thread or threaded metal and molded caps for sealing nonalkaline products not too volatile in nature, but containing ingredients that readily affect normal varnish, synthetic resin and wax coatings. In most cases where aluminum foil is used, it is desirable to use a composition cork backing, the reason for this being that this type of foil has an inherently hard surface and a resilient cork backing permits better conformity of the foil surface to the glass finish.

Lead foil (*chemically pure*) has been used for sealing products such as concentrated sulphuric acid, radiator compounds, leather dressings, automobile polishes, petroleum hydrocarbons and aromatic solvents, radiator anti-freeze and insecticides. Lead foil under no circumstances should be used for packaging food products or any other product that might come in contact with the skin of persons or animals, such as cosmetics, lotions, antiseptics, liniments and the like.

Lead foil (*composition*) is used in closures for sealing products such as automobile polishes, petroleum and coal tar solvents, certain cleaning compounds, radiator anti-freeze, furniture polish, lacquers and varnishes, and many similar products.

Laminated films

Laminated rubber hydrochloride is one of the most versatile. It is made by laminating a transparent sheet of rubber hydrochloride film (Pliofilm) 0.0012 in. in thickness to paper with a white pigmented thermoplastic adhesive. It is used in large quantities for sealing many alcoholic beverages such as whiskey and wines, chlorinated washing fluids, mineral waters, drugs and pharmaceuticals, saline solutions, eye washes, glycerine, silver polish, liquid shoe whitener, household ammonia, lime water, liquid shampoo and many other products. Being a rubber derivative with thermoplastic properties, it is not recommended for sealing oils or oily products, nor for products which are packed hot.

It does excel, however, in the protection it gives to many products because of its low water-vapor permeability factor, its excellent conformity to glass finishes and its property of aiding removal of the closure in which the liner is used.

Laminated cellophane is made by laminating thicknesses of 0.0015 in. or thicker non-moistureproof transparent cellophane to paper.

It is recommended for use on mineral, vegetable and fish oils and even for certain essential oils. It is suitable for sealing most organic solvents. However, it is unsuitable for sealing any product containing water.

Laminated polyethylene is made by combining a minimum thickness of 0.0015 in. of polyethylene film to paper with a thermoplastic adhesive. As yet this material has limited use due to insufficient time for its careful evaluation; however, it is expected to find use for sealing various chemicals and the like. This material has excellent flexibility and resiliency, as well as good aging qualities and low water-vapor permeability.

Laminated saran is made by combining 100-gauge or 0.001-in. thick extruded polyvinylidene chloride transparent film to paper with a white pigmented thermoplastic adhesive. This combination of materials has

* Vice president, General Felt Products Division, Standard Cap & Seal Corp., New York.

PHOTO COURTESY GENERAL FELT PRODUCTS.

TECHNICIANS determining film thickness by the Soxhlet process of extraction and evaluating the resistance of cap-facing materials.

produced the most resistant liner material yet developed by the closure industry. The following properties predominate in this unique facing: (1) high gloss and a very attractive white color; (2) excellent toughness, flexibility and tensile strength; (3) strong bond between film and paper; (4) minimum odor and taste; (5) outstanding chemical resistance; (6) low water-vapor permeability, which insures good sealing efficiency and hence long shelf life or product protection.

Laminated saran film is resistant to weak sodium hydroxide solutions, 50% acetic acid, 50% grain alcohol, 10% salt solution, mineral oil, corn oil and many other chemicals.

It has been found very satisfactory for sealing such products as perfumes, face creams, lotions, deodorants, hydrogen peroxide, shampoos, radiator compounds, denture cleaners, dentifrices, pine oil disinfectant, liquid antiseptics and many other drugs, chemicals and pharmaceuticals.

Due to the method of manufacture of saran film, there has been a tendency for it to shrink after attaching it to paper with a laminant. However, this shrinkage factor has been greatly reduced in the latest production of saran film and it is hoped that this objection will be eliminated entirely in the very near future. Laminated saran film is also more expensive than most of the other synthetic liner facings. However, this is not due entirely to the cost of the film alone, but to the cost of the laminant needed to attach it to the paper. It is hoped that laminants will be developed which will enable this very promising liner facing to be sold at a lower price.

Despite the above shortcomings, the demand for laminated saran liners has been increasing rapidly. This would seem to indicate quite strongly the merits of this product.

Varnish and resin coatings

In this classification we find by far the greatest demand for the varnish type. This type is produced in very large quantities by applying resistant oleoresinous baking varnishes to pure kraft, bleached kraft and paper having kraft and soda pulp fibres.

Liner paper manufactured using the above materials produces a fine appearing liner having high gloss, good flexibility and one with adequate resistance to water, brine solutions, food acids, vegetable oils and the like.

Because of these properties and the relatively low cost of this liner it has found virtually universal acceptance in the food packaging industry. It is successfully used for packaging peanut butter, all types of pickles, olives, cheese, jellies, maraschino cherries, mustard, pickled onions, vinegar, relishes, sauces and other condiments.

When an added wax coating is applied the varnished paper liner, with a suitable backing, is adequate for packaging such delicate products as mayonnaise and salad dressings which, due to their vegetable-oil content, are subject to oxidation which results in rancidity and product spoilage. Varnished paper with the added wax coating, when used in closures for sealing hygroscopic products such as soluble coffee products and malted milk, keeps air out of the package and hence prevents the product from caking or losing its flavor.

Varnished paper liners, generally speaking, have adequate resistance to water and water vapor, and therefore permit sufficiently low losses by evaporation to maintain the freshness of most foods.

So-called black alkali-resisting paper has been used in the closure trade for many years. It is quite similar to the regular varnished papers with the exception of its color, which is obviously black. The color is due to the presence of asphalt or gilsonite or both. This liner has good resistance to weakly alkaline products such as milk of magnesia, hair shampoos, shaving cream and many other drugs and pharmaceuticals. With the development of the newer, more chemically resistant synthetic facings, the demand for black alkali facing has been somewhat reduced.

Several white liner facings were developed shortly before the war and were further perfected during the war, at which time they served the closure trade with considerable merit. They are composed of coating materials based on urea-formaldehyde-melamine resin applied like a baking varnish to pure or bleached kraft paper. Their principal properties are solvent and oil resistance, and they were used on such products particularly during the war when tin foil and aluminum were not available. These facings were even used as a temporary replacement for rubber hydrochloride and vinyl chloride acetate, which were also unavailable during the war years. Today, however, it is not recommended for aqueous, alcoholic or any other products which are subject to evaporation through or between the liner and the glass finish.

Saran-coated paper, like the laminated film, is one of the newer developments which is finding increasing demand from day to day. It has an attractive appearance and is made by applying a coating of polyvinylidene chloride resin to paper from a solvent solution or an emulsion. At the present time the demand for the coated paper applied from solvent is the greatest. The emulsion-applied saran-coated paper has presented

several problems production-wise and therefore has not been perfected. However, when these problems are corrected it is expected that the demand will increase rapidly because of the economies involved.

Calendered coatings

Paper calendered and coated with vinyl chloride acetate has made a great contribution to the closure industry. It has been used quite universally for the past 14 years and with outstanding success in the drug and pharmaceutical industry. It is made by calendering white sulphite paper with a plasticized mixture of vinyl chloride-vinyl acetate resin copolymer having a thickness of approximately 0.002 in. It has been used consistently for sealing such products as carbonated beverages, face creams, lotions, shampoos, hair tonics, corn oil, mineral oil, wines, liquors, deodorants and most drugs and pharmaceuticals. It has excellent chemical resistance to weak acids and alkalies and many other chemical solutions. It has a very attractive appearance and is low in cost as compared to other plastic-type liners. However, it has a rather high water-vapor permeability.

Calendered polyethylene is made by the same process used in producing calendered vinyl chloride acetate and the resin used is briefly described under laminated polyethylene. This liner facing at the present time has only found a limited use because of the limited production and insufficient time fully to evaluate it. However, considerable interest has been shown in this product because of its excellent resistance to chemicals and its low water-vapor permeability.

Wax coatings

Last, but by no means least, are liners wherein the base coating is composed of refined paraffin wax, microcrystalline wax, ceresine wax or a composition formulated from all three types.

Refined paraffin wax, having a melting point of 133 to 135 deg. F., which is applied to both sides of a heavy grade of white sulphite paper stock, is used by the closure trade in the largest quantities. The total wax thickness is 0.002 to 0.003 in., while the over-all thickness is approximately 0.008 inch.

This liner has been used for a good many years for sealing hard candy, pills and tablets, dry drugs and pharmaceuticals, soluble coffee and other hygroscopic food powders, mild face creams and cosmetics. This liner is not recommended for products containing mineral, vegetable, fish or essential oils, nor is it recommended for products containing solvents of any nature or products containing chemicals.

The wax coating itself is resistant to chemicals. However, this is not the only consideration. Coatings of a paraffin wax which is crystalline in nature are always subject to penetration by liquids or vapors in a closed container. These liquids and vapors, however, do not as a rule pass through the wax molecule, but pass between them, due to lack of continuity of the wax coating. This may occur very slowly. However, when the base paper beneath the wax coating has absorbed sufficient moisture or liquids from the product, it will start to swell. On certain products this swelling of the paper will proceed to the point where the paper splits, causing splitting of the wax coating, evaporation and finally leakage of the product. For this reason, it is recommended that it be tested thoroughly on the product on which it is proposed being used.

Plastic wax coatings—Liners made under this designation are finding greater uses from month to month. Plastic wax liners are produced by first saturating pulpboard with 120 to 122 deg. F. refined molten paraffin wax. One side of the wax-saturated pulpboard is then coated with a wax composition based on a high melting point tough microcrystalline to a thickness of 0.007 to 0.008 inch.

This liner is now being supplied to many food packers for the packaging of olives, pickles, mustard, marinated herring and allied products. This liner gives excellent protection to these products. Due to the fact that the pulpboard backing is wax saturated, it is unaffected by liquid overflow from products and is not subject to swelling or mold growth should the product penetrate the liner.

Waxed pulpboard—This liner is made by coating pulpboard with paraffin wax or a combination of paraffin and ceresine wax. It is usually coated on both sides and when a sufficient coating is applied on the proper equipment, the liner is adequate for sealing hard candy, pills and tablets, dry drugs and pharmaceuticals, soluble coffee and other hygroscopic food powders, mild face creams and cosmetics.

Miscellaneous liners or sealing materials

Dark brown acid-resisting paper—This is composed of regular kraft paper coated with an oleoresinous varnish which has more or less of a mahogany color secured by either tinting the varnish or modifying it with another

SARAN, says the author, has produced the most resistant liner material yet. It is usually laminated to paper with a white thermoplastic.

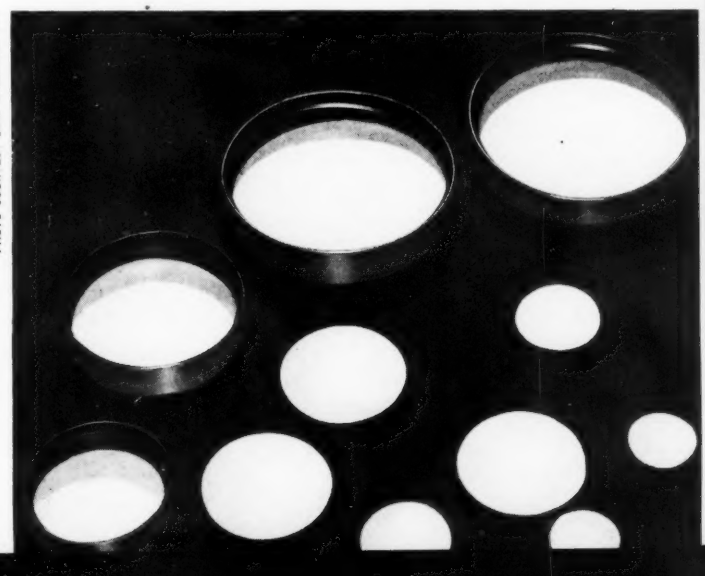
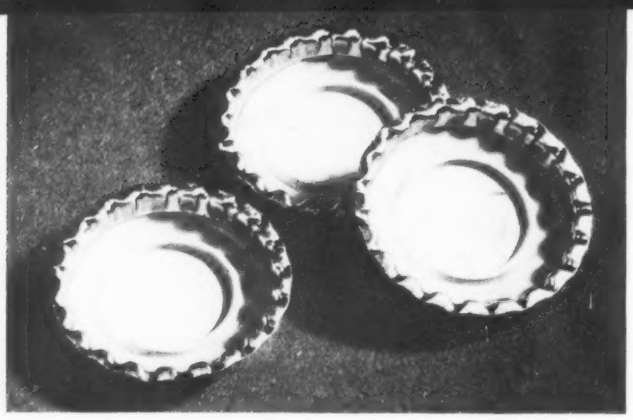


PHOTO COURTESY DOW CHEMICAL CO.



SAMPLES COURTESY CORA-LEE CORP.

NEW TYPE of liner for crown caps is Geon polyblend, which is molded right in the cap. These liners are reported to be able to withstand pressures as great as 300 p.s.i. without leakage.

varnish containing gilsonite or asphalt base. This material has been used in considerable quantities for sealing such products as corn syrup. It is also used on products where slightly better alkali resistance is required.

Poured-in composition liners—These materials are supplied to closure manufacturers in a water emulsion or dispersion and are basically either natural or synthetic rubber.

This type of compound is used in large quantities principally on food products which must be sealed under vacuum and where the product is filled hot or processed after filling.

Waxed facings—It has been determined by experience that a wax coating applied to a liner facing such as varnished paper, saran or rubber hydrochloride film greatly enhances its sealing efficiency. This particular wax coating normally measures 0.001 to 0.002 in. in thickness and obviously must be resistant to the product on which it is to be used. The function of this added wax coating is to aid the sealing properties of the liner by conforming to the glass jar finish, which greatly reduces the amount of air entering the package. Liners produced in this manner have proved themselves over a period of years and are doing an enviable job in the food packaging, drug and cosmetic fields.

Liner backings

Pulpboard and newsboard are the most popular backings and are used in the largest quantities in the closure trade. They are adequate for use in connection with the sealing of most food products when duplexed to the proper facing material. In the food packaging industry, where price is such an important factor, these backings must be used for economic reasons.

Composition cork is conceded to be the most efficient liner backing because of its ability to compress readily at normal cap-sealing pressures and return to its original position. On the other hand, it has been found that composition cork must be backed with paper to reduce its tendency to curl, which sometimes causes the liner to fall out of the cap. Some composition cork shrinks in liner form under improper storage conditions and leads to a poor fit of the liner in the cap. Regardless of the above objections, cork backing with the proper facing material is recommended for sealing certain liquors, perfumes, highly alcoholic products, volatile solvents, essential oils and the like.

Gray felt and white felt—These backing materials are used in fairly good quantities for those products where pulpboard and newsboard have been found to be too hard and where the excellent sealing efficiency of composition cork is not required. Liners backed with white or gray felt have been found quite effective in molded closures having a relatively thin construction and subject to breakage when applying cap to the bottle. By using a felt backing, greater compression into the liner is made by the glass finish at low sealing pressures. Felt backings have been found adequate in back of facings for sealing many volatile products.

Universal liner still sought

It will be readily inferred on reading this article that the closure trade is still seeking one liner for sealing all products packaged in glass.

Material to be used in a facing such as this should be insoluble in water, acids, alkalies, organic solvents, all other chemicals and oils. In addition, it must have a minimum of odor and taste and have good flexibility and resilience sufficient to conform to glass finishes. It should have a very low rate of vapor transfer, as well as resistance to temperatures up to the boiling point of water. It should have relatively good resistance to oxidation and to the transmission of volatiles and, last but not least, an attractive appearance and a sufficiently low cost to permit it to be used on products of all price ranges.

It has been indicated that saran coatings and saran laminations have produced the most resistant liner facings and this is quite true with respect to packaging most commercial products. However, polyethylene-faced liners will have to be given serious consideration when choosing the universal liner.

Polyethylene has exceptional resistance to solvents at temperatures under 140 deg. F. However, some solvents, particularly ketones and ester solvents, will affect saran at any temperature.

At the present time the principal objection found to polyethylene facings is that they permit transmission of some organic vapors from products on which they are used. Because of this some of the bouquet would be lost on perfume and other cosmetics when sealed with polyethylene-lined caps. In addition, on products containing volatile solvents such as esters, ketones and some of the aromatic hydrocarbons, high evaporation losses could be expected through polyethylene facings which would render them impractical for use on this type of product.

If these objections can be overcome without sacrificing the other good properties of this material, the approach to a universal liner will be close at hand.

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Paper container for hot-process liquid

QUESTION: We are introducing a hot-process liquid food product which we would like to package in a single-ply paper container and would like some information on the procedure and feasibility of applying a thermoplastic material to the container which would act as a sealer and afford it additional strength.

ANSWER: The problem of finding a suitable coating or plastic impregnation for a single-ply container for a hot-process liquid food product to give the properties you require is a complicated one. Your best approach would be to check with your paper supplier to see if he can furnish you paper which has been specially sized or similarly treated with certain resins. Another possible solution would be to coat the paper with a lacquer-type coating. Such a coating would allow you to fabfricate the cup entirely by heat sealing. Your problem would be to obtain a coating or treatment which would not impart any taste or odor to the product and which would be sufficiently low in cost for your particular requirements.

Perforated vs. unperforated produce bags

QUESTION: There have been several articles dealing with the packaging of produce in which the bags used were perforated in different ways. It is surprising to us that in some cases the perforated bags did not show any differences in moisture loss as compared with the bags which were unperforated, even though the films themselves were of moistureproof materials. This seems to us to be against the theories we have heard about the necessity of tight seals, etc., to obtain good moistureproofness.

ANSWER: In most packaging problems involving moistureproofness, the atmosphere inside the package that is surrounding the product is considerably lower in humidity, i.e., drier, than the atmosphere surrounding the package. As a result of this condition, moisture from the atmosphere flows into the product through either the walls of the package or through mechanical openings of various kinds. Obviously, under these conditions the way to obtain most effective moistureproofness is to limit the mechanical openings by heat sealing, double folds, well overlapped seams and other similar means. When this has been accomplished, then the flow of moisture is entirely through the materials by the phenomenon known as permeation. In such a tightly sealed package, the degree of moistureproofness becomes a function of the water-vapor permeability of the material of which the package is composed. However, the conditions described are not always found in the packaging of vegetables. In many cases vegetables are kept under cooler conditions than exist for most packaged goods. Under these conditions and when the packages are piled up or in shipping cases, the atmosphere in the package is highly humidified, as is the atmosphere inside of the shipping case. Since temperature and moisture conditions are approximately similar on either side of the bag walls, moisture will not migrate in either direction. Under these conditions the product will not gain or lose moisture regardless of the moistureproofness of the material or its continuity. However, if the bag were exposed to dry air, then the produce would lose moisture and the bag with holes in it would lose at a greater rate.

Closure of glassine bags

QUESTION: We are packing a granular material weighing 1 oz. in a small glassine bag. At present we are using a small staple through a double fold of the bag to make the closure. We have had many complaints about this method and we would also like to increase the speed of making this top closure.

ANSWER: Metal staples are not a satisfactory means of closing glassine or cellophane bags because of the tearing of the material and the inability to prevent sifting. Also, metal staples are undesirable to use with a food product, since there is a possibility that they can be dropped into food as the bag is being emptied.

One of the fastest and most satisfactory closures on a small bag of this type can be made by the use of glassine with a thermoplastic coating on the inside or on both sides. With such coated stock, the filled bag can be fed into a continuous heat sealer and the closure made quickly, neatly and effectively. It is also possible to use a continuous gluing means, although in the case of glassine the closing application must be done carefully to prevent puckering.

Packaged in Du Pont POLYTHENE

Precision ball bearings come...

Tough, strong, tear-resistant polythene protects these precision bearings from dirt and moisture. The polythene package is not affected by the oil used to lubricate the bearings—or by acids or alkalies it may come in contact with. And sealing, creasing or contact with water won't appreciably alter polythene's high water vaporproofness. Packages are made from flat polythene tubing, heat-sealed.

More polythene is on the way...now's the time to get ready for it

Increased production of polythene molding powders by Du Pont is working to ease the current short supply. We'll be glad to give you more data on the advantages of polythene for packaging. Get acquainted with polythene today . . . so you'll be fully able to profit with it tomorrow!

Polythene molding powders are made by the Plastics Department of the Du Pont Company. This plastic is supplied by extruders, molders, and other processors in film 1 to 30 mils thick, widths up to 112 inches; lay-flat seamless tubing, widths from 2 to 56 inches; injection- and blow-molded containers and other forms. We'll gladly suggest suppliers. E. I. du Pont de Nemours & Co. (Inc.), Plastics Dept., Main Sales Offices: Empire State Building, 350 Fifth Avenue, New York 1, New York; 7 South Dearborn Street, Chicago 3, Illinois; 845 East 60th Street, Los Angeles 1, California.

***Bearing packages** used by The Barden Corp., Danbury, Conn.: made from polythene tubing extruded by Plax Corp., Hartford, Conn. Watch-case envelope made by Mehl Mfg. Co., Cincinnati, from polythene tubing extruded by Visking Corp., Chicago, and Plax Corp., Hartford, Conn., for Elgin National Watch Co., Elgin, Ill.*

Watch cases travel through plant protected from damage

Polythene package keeps the soft, highly polished metal from being scratched or otherwise marred as the case goes from one assembly point to another. The polythene envelope is soft enough not to scratch the delicate surface of the case—tough enough to be used over and over. And doesn't run risk of contaminating watch movement with lint. Envelope is made from polythene tubing, heat-sealed.

POLYTHENE IS:

Light in weight
Chemically inert
Tough, strong
Tear-resistant
Water-resistant
Water vaporproof
Free from taste, odor, toxicity
Heat-sealable
Free from plasticizer

DU PONT
REG. U. S. PAT. OFF.
Plastics
BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Mail coupon for Polythene Packaging Data

E. I. Du Pont de Nemours & Co. (Inc.)
Plastics Department
Wilmington 98, Delaware

Please send me more details on **DU PONT POLYTHENE** for packaging.

*Name*_____

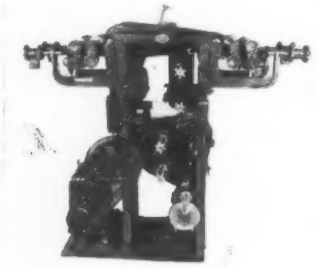
*Firm*_____

*Address*_____

Equipment and Materials

ANILINE TWO-COLOR IMPRINTER

The Pamarco Auto-Printer, now offered by Paper Machinery & Research, Inc., Roselle, N. J., is a small aniline press designed to print two colors on pressure-sensitive tape, paper or silk rolls up to 6 in. in width. The new machine slits, perforates and rewinds in one operation. Among its features, according to the company, are an exclusive dual unwind and an automatic rotating rewind that enable the machine to print continuously while the operator feeds the unprinted roll and removes printed ones. Especially treated impression rolls are said to insure perfect register.

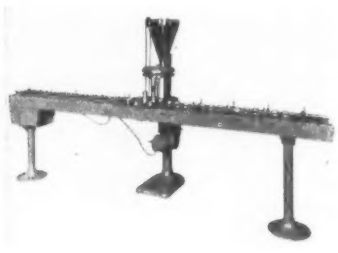


NEW ADHESIVE FOR SEALING CARTONS

A new carton-sealing adhesive, "Cartontite," introduced by Paisley Products, Inc., Chicago, is described as a fluid brown adhesive, prepared from a fully converted dextrine base, to be used as received or diluted with approximately 10% water. It is said to be non-foaming, odorless, non-toxic and can be used cold. Cartontite is reported to have a working range so designed that the setting of the adhesive film coincides with the timing of the pressure phase of the carton-sealing machine.

NEW FILLER AND CONVEYOR COMBINATION

Frazier & Son, Belleville, N. J., manufacturers of Whiz-Packer package filling machines, are introducing a combination filling machine and endless belt conveyor with a rotary dial table in the center. The dial takes one container from the incoming side of the conveyor and feeds it, in correct timing, under the filler spout. The spout seats itself on top of the container before the discharge to eliminate dusting and, according to the company, it gives a positive fill with no spillage. The rotating dial then continues its rotation, feeding the filled container to the outgoing side of the conveyor. It is reported that the dial mechanism eliminates breakage.



UNIT ATTACHES PACKAGES TO DISPLAY CARDS

The New Jersey Machine Corp., Hoboken, N. J., announces that an attachment has been developed for its Pony Labelrite labeling machine which will permit it to attach packages of razor blades, etc., to counter display cards automatically. The first unit with this attachment is reported to be applying color chips to paint sample cards at the Sherwin-Williams Co., with a production of 10,000 to 12,000 cards in an 8-hr. period.

AUTOMATIC WEIGHER FOR DRY PRODUCTS

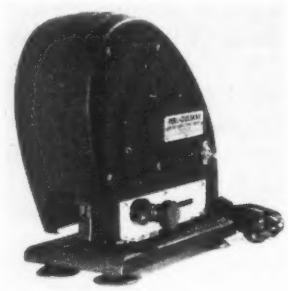
Wright Machinery Co., Durham, N. C., is introducing a new model of its Hy-Tra-Lec positive-displacement weighing machine, designated as Model M, specially designed for high-speed, accurate, automatic weighing and filling of candy, metal screws and other dry products. Range is from 1/2 to 16 oz. Single and double weighing units were in operation at the recent Packaging Show and, according to the company, triple-head units are available. The Hy-Tra-Lec principle involves no beam or spring scales.

PRICE REDUCTION ON POLYETHYLENE FILM

The Plastics Division of Reynolds Metals Co., New York, announces a general price reduction on its Reynolon 1,000 polyethylene film, amounting to as much as 21 cents per lb., depending upon the quantity ordered.

AUTOMATIC STAPLING MACHINE

Perl-Oussani Machine Mfg. Co., Brooklyn, is introducing an automatic electric stapling machine called "Staplex" which has an exclusive, patented, single contact control for instantaneous stapling of articles upon insertion into the machine. The operation is said not to be dependent upon any timing by the operator. A standard staple is used, with a front feed. Stapling in the same position over again is prevented by the contact-control feature. Another feature allows adjustment for the entire depth of the machine through the use of a calibrated scale for positioning.

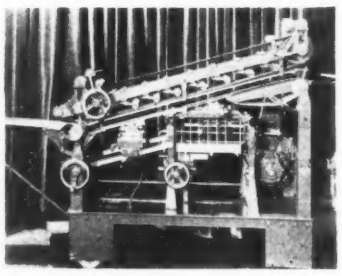


DELAYED-ACTION ELECTRIC-EYE CONTROL

Photoswitch, Inc., Cambridge, Mass., announces a new delayed-action photo-electric control instrument developed especially for use on conveyor lines to indicate jamming of the lines. The delayed-action interval is adjustable from 1/20 to 5 seconds. When the control and light source are placed on opposite sides of the conveyor, the relay action occurs only when the light beam has been interrupted for the predetermined time interval.

ELEVATING LABELING MACHINE

A new labeling machine that introduces a straight-through elevating principle in the operation is now being marketed by the Chisholm-Ryder Co. of Pennsylvania, Hanover, Pa. Instead of operating on



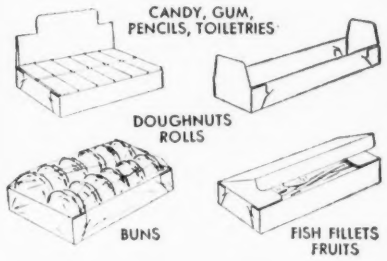
Another Plant Cuts Packaging Costs with New High-speed Carton Set-up Machine

AT FRENCH BAKERY CO., CLEVELAND, the Tray-Lock Machine has substantially cut the cost of packaging sandwich buns. Here the packer puts 6 buns in carton set up by the machine, which can attain speeds of 90 units per minute. Output is easily synchronized with the operator's filling capacity.

Replaces expensive hand set-up method with automatic General Mills Tray-Lock Machine

If your product can be packed in a lock-type carton, the odds are you can cut your packaging costs with the Tray-Lock Machine just as the French Bakery Co., Cleveland, has done. Candy, tomatoes, frozen fish, medical supplies, novelties, plastic items are all being packaged cheaper and faster with this new machine, which sets up cartons automatically from flat, unglued blanks.

A VARIETY OF CARTON STYLES are produced by the Tray-Lock Machine ranging from 1" to 18" in width, 2" to 14" in length, and ¾" to 6" in height. Cartons are neatly squared, have straight, sturdy sides with no diagonal scores to weaken them.



Mechanical Division
General Mills, Inc.
Packaging Machinery

Made by one of the world's largest users of packaging machinery

SEND US a description of your product and the cartons you're now using. We'll be glad to give you complete information about the results you can expect from the General Mills Tray-Lock Machine, together with prices and specifications. Send this coupon today!

General Mills, Inc., Dept. M-69
1620 Central Avenue, Minneapolis, Minn.

I am enclosing samples of our present cartons and a description of our product. Please send complete information on the Tray-Lock Machine and tell me how it can be adapted to our packaging operation.

NAME.....POSITION.....

FIRM.....

ADDRESS.....

CITY.....ZONE.....STATE.....

ONE CALL FOR ALL

• BASIC IDEAS • ART WORK • CARDBOARD
• CONSTRUCTION • METAL • PLASTIC • WOOD
• GLASS • LAMINATION • PRINTING

RIVER RAISIN PAPER COMPANY
DISPLAY DIVISION • MONROE, MICHIGAN

RIVER RAISIN
DIMENSIONAL DISPLAYS

FABRICATED* LEATHER

• *Looks* like Leather • *Contains* Leather
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• Costs much *less* than Leather

Perfect for all PACKAGED PRODUCTS

* Composed of approximately 40% ground leather by volume, plus other ingredients

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New York—450 Fourth Ave. Boston—114 South St.

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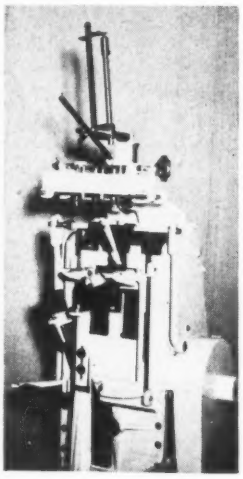
Equipment and Materials
(Continued)

down-hill or level carriers, the CRCO- New Way Model E machine labels containers as they are elevated and discharges them at a point 12 or more inches higher than at the feed end, according to the company. This development permits a straight gravity flow from closing machines to case sealers and eliminates the need for one or more elevators in the line. The machine is adjustable for containers from $1^1/_2$ to $5^1/_8$ in. in diameter by $1^3/_4$ to 7 in. in height.

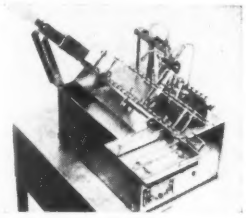
VERSATILE WRAP-AROUND LABELER



For wrap-around labeling of collapsible tubes, vials or other containers less than $1^1/_4$ in. in diameter, Dumatic Industries, Philadelphia, has a new, compact, small, automatic machine, already in use in the pharmaceutical field. According to the company, one operator can handle production up to 50 containers per minute. Test installations, it is said, have shown that one unit saves up to $5,000 a year by increased production. Labels as small as postage stamps, or up to 4 in. wide by 3 in. long, can be handled by the machine.

NEW AMPOULE FILLER AND SEALER

The Chase Equipment Corp., New York, announces a new ampoule filling and sealing machine with maximum operating speed of 32 ampoules, vials or onionskin tubes per min., with a ±1% variation in fill. For ampoules, the range in fill is from 0.1 to 15.0 cc.; for vials, from 0.1 to 22.0 cc. and for onionskin tubes, from 0.1 to 6.0 cc. The machine automatically hopper feeds, fills, inert-gas flushes and flame seals the containers. If the container is not in position to receive it, the filling needle is inoperative. Special features of the machine are the syringe which sucks back all excess liquid and creates a vacuum sufficient to draw the liquid from the bulk container through a sintered glass filter. There is a special anti-foam needle that reduces foaming. All parts coming into contact with the liquid can be removed in 15 seconds, it is said, and change-over time is less than 10 minutes.

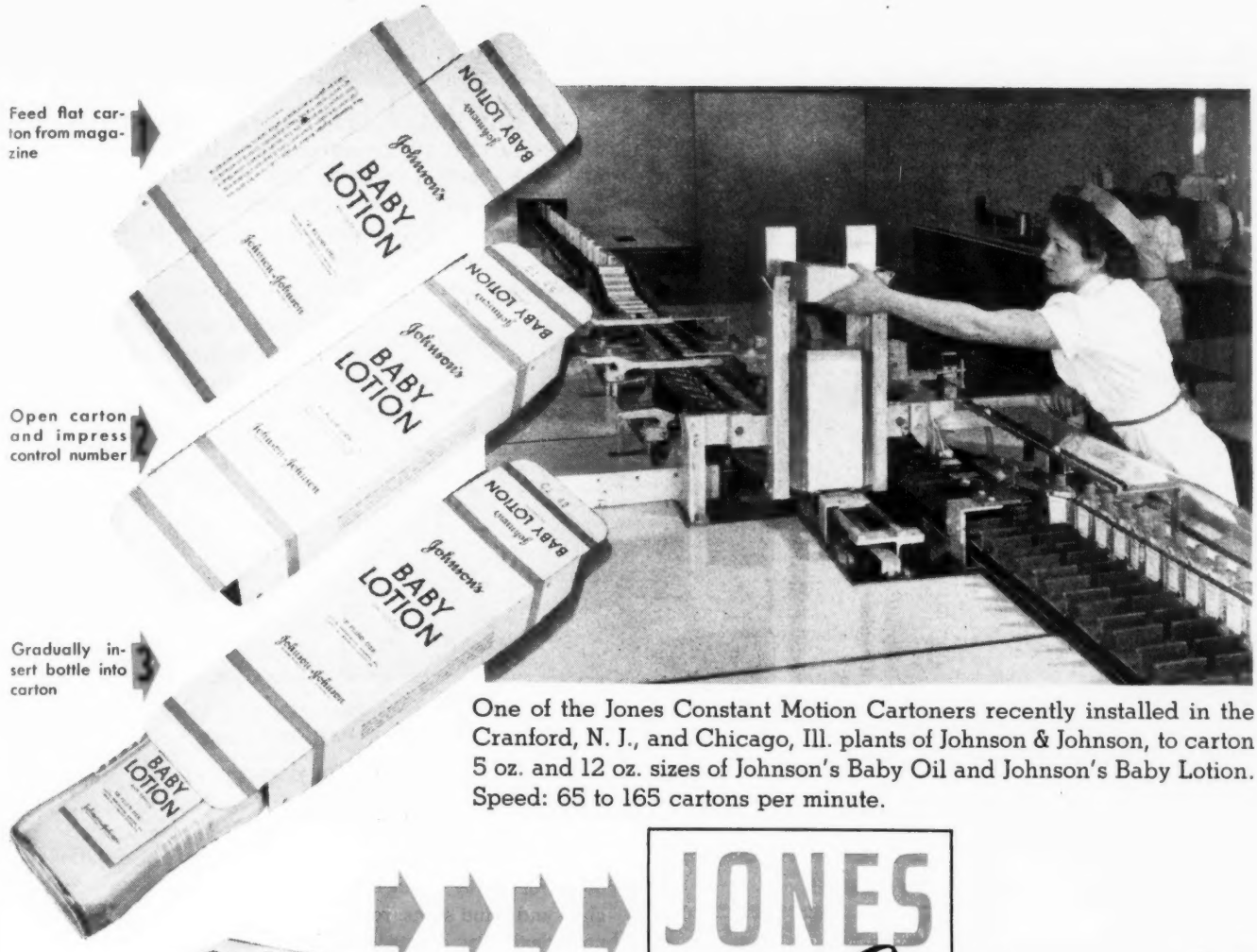


POLYETHYLENE FILM 100 INCHES WIDE

The Tupper Corp., Farnumsville, Mass., announces that its associated company, Tupper-Texas, Inc., Cuero, Tex., has achieved production of polyethylene film in widths exceeding 100 in. Film in 96-in. width also will be available in limited quantities.

CARTON SETTING-UP MACHINE

Lock-type paperboard trays and cartons can be set up from flat blanks at high speeds on an improved machine introduced by the Mechanical Division of General Mills, Inc., Minne-


Feed flat carton from magazine 1
Open carton and impress control number 2
Gradually insert bottle into carton 3
Close both ends of carton 4
Johnson's
BABY LOTION
Johnson-Johnson

One of the Jones Constant Motion Cartoners recently installed in the Cranford, N. J., and Chicago, Ill. plants of Johnson & Johnson, to carton 5 oz. and 12 oz. sizes of Johnson's Baby Oil and Johnson's Baby Lotion. Speed: 65 to 165 cartons per minute.

JONES *Cartoned!*

For the Cranford, New Jersey plant, famous for its ultra-modern styling and efficiency, Johnson & Johnson demanded the *finest* in automatic machinery for low cost, trouble-free operation at high speeds.

Jones Constant Motion Cartoners easily met these requirements. Operating at better than 98% efficiency, these Jones Cartoners have fully justified their selection.

Would you like to increase the efficiency—reduce the cost—of cartoning *your* product?

Remember,
ONLY THE Finest CARTONER
CAN GIVE YOU THE Lowest CARTONING COST

R. A. JONES & COMPANY, INC.

P. O. Box 1295 CINCINNATI, OHIO

THE MAJORITY OF AMERICA'S CARTONED PRODUCTS ARE JONES CARTONED

CUT PACKAGING COSTS!

use FINDLEY service-tested ADHESIVES

MORE FOR LESS!

✓Producing more for less through cutting costs by maintaining peak production, is the big job facing every manufacturer today. Faster, trouble-free production and better, more attractive products and packages spell P-R-O-F-I-T-S. Because every Findley Adhesive gives you these things, you get more for less.

DOUBLE VALUE!

✓Every Findley Adhesive carries a double barreled load! First, they assure faster trouble-free production, greater mileage, less down time for handling and clean up, and fewer rejects. Second, they produce safer, more attractive packages . . . packages strong in shelf appeal . . . packages that spell freedom from damage claims.

FOR EVERY PACKAGING APPLICATION

✓There's a Findley Service-Tested Adhesive for every packaging, labeling and converting need . . . for every stock and finish . . . to work on all types of equipment.

PERFORMANCE INSURANCE!

✓For over 45 years leading manufacturers have banked on Findley service and experience to help them cut costs. The entire Findley organization is at your service to help you cut costs. Call . . . wire or write.

plants at MILWAUKEE AND HOUSTON

sales offices in CHICAGO, KANSAS CITY, NEW ORLEANS, DALLAS, HOUSTON, MINNEAPOLIS, KALAMAZOO, LOUISVILLE, AND OGDEN, UTAH

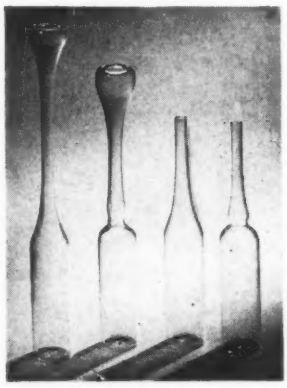
Findley's INDUSTRIAL ADHESIVES exclusively

THE F. G. FINDLEY COMPANY • 3043 W. PEMBERTON AVENUE • MILWAUKEE 10, WIS.

Equipment and Materials
(Continued)

apolis. Fully automatic, the Tray-Lock machine requires no operator, sets up 70 cartons per min., with two speed ranges, and handles any size from $4\frac{1}{4}$ to 18 in. in width, 2 to 14 in. in length, $\frac{3}{4}$ to 6 in. in side-wall height and $\frac{3}{4}$ to 6 in. in end-wall height. Maximum size of carton blank is 16 by 20 in.

RESUMES AMPOULE MANUFACTURE

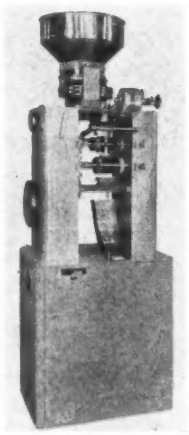


The Wheaton Glass Co., Millville, N. J., announces the resumption of glass ampoule manufacture. Its "No-Sol-Vit" ampoules are being offered in four series: Funl-Tip (series 5,000 and 5,100) and Trim-Tip (series 6,000 and 6,100). The company also manufactures the glass tubing from which the ampoules are made. Ampoules are available in the series in 1, 2, 5, 10, 20 and 50 ml. capacities.

PLASTIC SPRAY FOR PAPER LABELS

One of the uses of the new plastic spray, "Krylon," now being marketed by Foster & Kester Co., Inc., Philadelphia, is as a protective coating on paper labels. Advantages of the acrylic-base plastic spray are reported to be elimination of ovens for drying, cleaner appearance of the labels, reduction of glare and blind spots, reduction of ink costs, moistureproofness, flexibility, constant color, high abrasive quality and resistance to extreme temperatures.

PACKET FORMING, FILLING AND SEALING



Triangle Package Machinery Co., Chicago, is now marketing the "Roto-Pak"—a new automatic machine for making, filling and sealing packages of cellophane, Pliofilm, polyethylene and foil laminate materials with free-flowing dry products. The machine automatically forms the package from two rolls of materials, sealing all four edges after filling, at high speed. The product is fed from a hopper into a set of measuring cups which deposit measured loads through a forming tube into the packet to form a package 1 in. square to 6 in. wide and over 6 in. long.

WIRE BAG-TYING MACHINE

A bag-tying machine said to tie 750 bags per hr. is now available for immediate delivery, according to the manufacturer, Babson-Dow Mfg. Co., Boston, Mass. The "Little Giant" machine is supplied in either a portable or mounted model. It accommodates bags of any size and height, according to the manufacturer, and securely wires all types. Operated with a $\frac{1}{3}$ hp. motor, the machine has two grooved finger projections which hold the wire. When the ends of the tie are secured in the grooves, the operator pulls the bag away from the machine

PRE-PACKAGING FRESH CUT FLOWERS

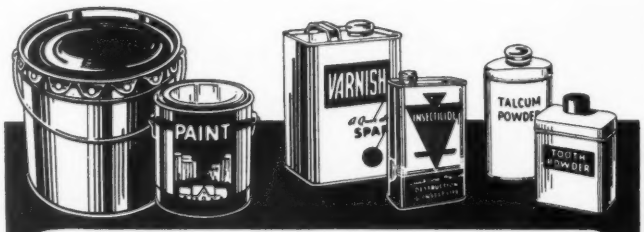
Fresh cut flowers are now pre-packaged by the Hill Floral Products Co., Richmond, Ind., for the public's every day use and enjoyment. Cellophane, fed from a roll, is automatically cut to size, then folded and sealed around the boxes in which the flowers are packed. Again the Hayssen shows its adaptability in meeting the challenge of a new activity. 1000 packages of Hill's flowers per hour are wrapped on a Hayssen. Fully automatic, the Hayssen is meeting the requirements of an ever growing list of Hayssen users. The wrapping material of your choice can be used in economical roll-form. The Hayssen, too, can be easily adjusted to handle a wide variety of sizes; can be loaded manually or automatically with your conveyor system. For complete information on what the Hayssen can do for YOU, write to the factory.

HAYSSEN MFG. COMPANY, SHEBOYGAN, WIS.

Hayssen
ELECTRIC EYE WRAPPING MACHINES

Flowers pre-packaged by Hill Floral Products Co., Richmond, Indiana

IT PAYS TO WRAP THE HAYSSEN WAY



QUALITY PRODUCTS sell better in QUALITY CONTAINERS

. . . and they get better protection, too. For best results from your containers, choose those that best promote and protect your products — sales-building, sturdy lithographed metal containers.

Here is where National Can may be of very real help to you — in basic container design, in origination of layout and illustration, and in color selection. Nearly fifty years of experience in the manufacture of lithographed metal containers backs these National Can services.

Improve your containers — make them worthy of your products by using the dependable and experienced National Can packaging service and supply. For full details, contact:

NATIONAL CAN CORPORATION

Executive Offices: 110 EAST 42nd STREET, NEW YORK 17, N. Y.

SALES OFFICES AND PLANTS: BALTIMORE, MD. CHICAGO, ILL. HAMILTON, OHIO BOSTON, MASS. INDIANAPOLIS, IND. MASPETH, N. Y. CANONSBURG, PA. ST. LOUIS, MO.

FOR BETTER PACKAGING!

PARTITIONS

THAT PROTECT AND SAFEGUARD YOUR PRODUCTS

•

IMMEDIATE ATTENTION
Given to Requests for Estimates

Prompt Deliveries Guaranteed

Reasonable Prices Assured

WRITE, PHONE, WIRE for QUOTATIONS on YOUR REQUIREMENTS

Manufacturers of Paper Board Partitions

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Easy, Perfect HEAT SEALING

WELLS THERMOSEALER

Style TF

Listed by Underwriters' Laboratories, Inc.

Amazingly Accurate CONTROL of Base-Heat Properly Seals Heat-Sealing Materials

Each heat-sealing material requires its own particular temperature to seal it properly.

The Wells Thermosealer solves this tricky problem—makes it easy—because Wells developed an adjustable Thermostat that holds the temperature of the aluminum base within the close tolerance required for the given heat-sealing material. You get perfect seals. In devices where the temperature is not closely controlled, sealing is haphazard.

Assures Perfect Seals

For more than 10 years the Wells Thermosealer has proved reliable. It is sturdily built for long years of good service. Made by the Wells Manufacturing Co., a prominent electrical manufacturer of 30 years' experience, the Thermosealer is widely used the nation over. Users try one, like it, and buy more.

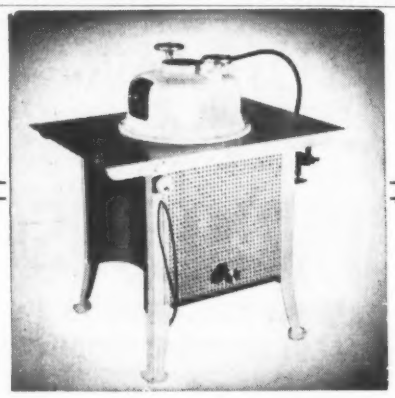
It plugs into any Alternating-Current Convenience Outlet of 110 volts. Properly insulated and built for safe use. Has long-lasting full-size Heating Element. Adjustable Temperature Control of high accuracy.

The Wells Thermosealer, built of Aluminum and weighing but 10 ounces, does not fatigue the operator.

Sold by Dealers in Heat-Sealing Materials

WELLS MANUFACTURING CO.

220 Ninth Street — WELLS MADE WELLS IS WELL MADE — San Francisco 3, Calif.



The PerfeKtum AMPWASH Rotary Type

A new development for washing ampuls, vials and similar containers in plants which do not require the quanity output of the larger conveyor-type machines. Average operator can wash 1500 to 2000 containers per hour. Has variable speed drive. Easy to operate and install.

Write for complete literature on the AMPWASH and our other filling and sealing equipment.

PerfeKtum
PRODUCTS COMPANY
Established 1922
300 Fourth Ave. New York 10, N. Y.

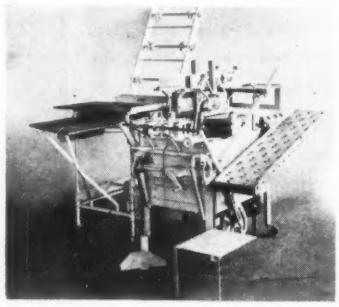
PerfeKtum TRADE MARK REG.

Equipment and Materials
(Continued)

and this movement engages a clutch which causes the fingers to twirl the wire. When the bag is tied, the operator releases the bag by leaning it toward the machine so that the tie ends are disengaged.

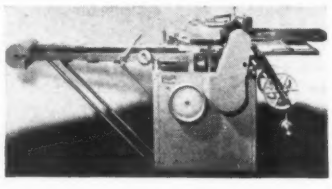
WRAPPING MACHINE FOR PRE-PACKAGING

A solution to many of the problems arising in the pre-packaging of meats and delicatessen items is offered by the redesigned Corley Miller heavy-duty wrapping machine now being manufactured by the Miller Wrapping & Sealing Machine Co., Chicago. The machine mounts seven rolls of cellophane, of varying widths, simultaneously, to take care of all sizes of packages; to change size the operator need only release two handles from the feed roller and refeed the new web of desired size. The range of the machine is such that it will handle anything from two slices of ham up to a whole cleaned and cut chicken. It will wrap all uniform delicatessen items, round, rectangular or square, without any paperboard stiffener. Red meats can be wrapped in pressed-board trays. Side heat-sealing plates can be moved from vertical to an inclined position to handle slant-sided meat boats. Wraps produced on the machine are said to be comparable in uniformity and neatness to hand wraps, with a saving in cellophane estimated at 30%. Experience indicates that the single operator required for the machine equals the production of from three to seven hand wrappers. Selling agent for the machine in the East is Amsco Packaging Machinery, Inc., Long Island City, N. Y., and in the Far West, Simplex Wrapping Machine Co., Oakland, Calif.



DISK-WRAPPING MACHINE

Disk-shaped products such as cookies, tarts, pies, mint patties, typewritter ribbons, ball bearing races, etc., are automatically wrapped by a new machine manufactured by the Wrap-King Corp., West Springfield, Mass. The "Wrap-King" machine is available in two sizes. Model DW handles disks $1\frac{1}{2}$ to 3 in. in diameter and $\frac{1}{4}$ to 1 in. thick at speeds of 60 to 125 packages per min. Model DW-2 handles disks $2\frac{1}{2}$ to 5 in. in diameter and $\frac{1}{4}$ to $1\frac{1}{2}$ in. thick at speeds of 30 to 80 packages per min. Heat-sealing cellophane, waxed paper and foil in rolls can be used or non-heat-sealing materials used with a thermoplastic label.



CARTONING MACHINE

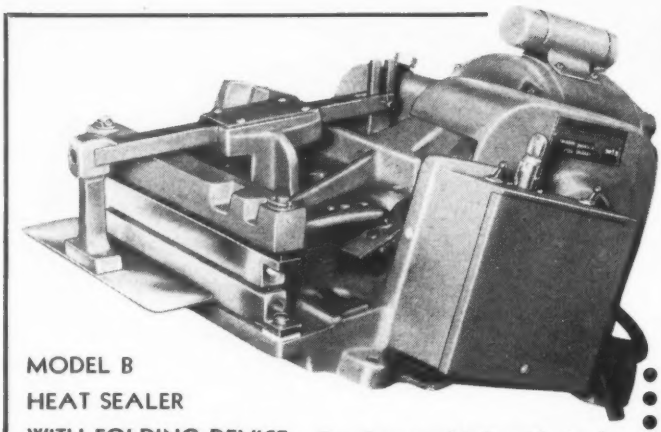
A new model cartoning machine (Model 45) is being introduced by the Container Equipment Corp., Newark, N. J. It consists of three units—a carton feeding conveyor, a sealing unit and a compression unit. It feeds and opens cartons, in-

we like Large Families

That's why all Hazel-Atlas lines are so complete in size and capacity. For whether it's a standard line or specially designed containers, family resemblance means product identification.

HAZEL-ATLAS GLASS CO.

Wheeling, West Virginia



MODEL B
HEAT SEALER

WITH FOLDING DEVICE — One of our complete line of heat sealers for sealing, folding, hole punching and coding all types of heat sealing bags.

HAVE YOU PACKAGE PRODUCTION PROBLEMS?

Our job is to supply standard equipment to do standard packaging jobs like wrapping, sealing, conveying and filling.

We also design and engineer efficient packaging systems, and design and build special machinery for special packaging needs.

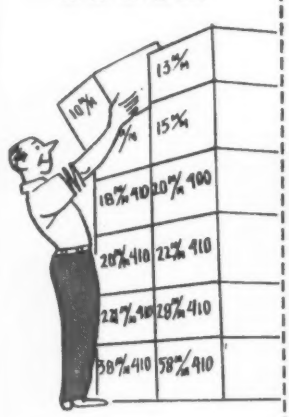
If you need *any* kind of help in setting up or modifying a packaging operation, we'd like to consult with you.

WE'VE MOVED to new and larger quarters to continue offering you the best in service, quality and price.

WRAP-ADE MACHINE CO. Inc.
83 Valley Street, Belleville, New Jersey

MOLDED CLOSURES
by Terkelsen

STOCK



Stock sizes 10 m/m to 58 m/m in phenolics or striking urea colors

CUSTOM

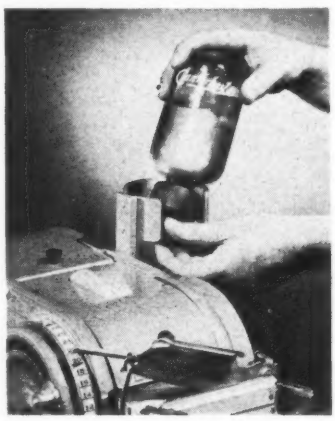
We specialize in private mold designs

Terkelsen **MACHINE COMPANY**
324 A STREET, BOSTON 10, MASS.
Jesselson Sales Co., Inc.
347 Fifth Ave., New York 15
J. Rabinowitz & Sons, Inc.
2 Hanson Place, Brooklyn 17

Equipment and Materials
(Continued)

serts single or multiple products, glue seals or tucks flaps, and delivers filled cartons at rates of 30 to 60 cartons per minute. One of the features of the machine is that it will carton multiple units in display boxes. Minimum size which the machine can handle is 1 by $^5/_8$ by $3^3/_8$ in.; maximum size, 6 by 4 by 12 in. without special specifications.

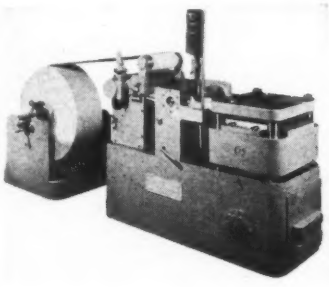
PLASTIC WATER-FOUNTAIN BOTTLE



Water-fountain bottles blown in one piece of shatterproof transparent cellulose acetate butyrate have been developed by the Plax Corp., Hartford, Conn., using Tennessee Eastman Corp. material, for use on tape-sealing machines manufactured by Better Packages, Inc., Shelton, Conn. Advantage of these plastic bottles is the elimination of accidental breakage.

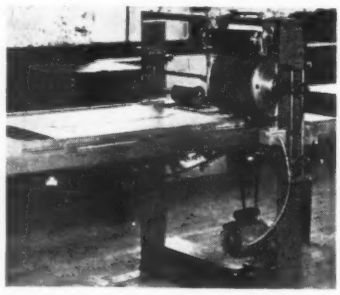
NEW BLANKING AND CREASING PRESSES

Mercury Engineering Corp., Milwaukee, Wis., announces its Series "K" blanking and creasing presses for plain display, lock-type and glued folding cartons or set-up box blanks, which work from roll stock, printed or plain, or can be synchronized to draw directly from a web-type printing press. The machine is available in three sizes: K-15 which takes a web of $15^1/_2$ in., has a blank length of 16 in. and speeds of from 9,000 to 18,000 per hr.; K-20, web size $20^1/_2$ in., blank length 20 in., speeds 7,500 to 15,000 per hr.; K-30, web size $30^1/_2$ in., blank length 20 in., speed 6,000 to 12,000 per hr. One of the patented features of the new press is an automatic expanding and contracting metering or unwinding compensator roll which can be hand adjusted or set to hunt automatically for correct advance or to retard the speed of the feed by two electronic scanners.

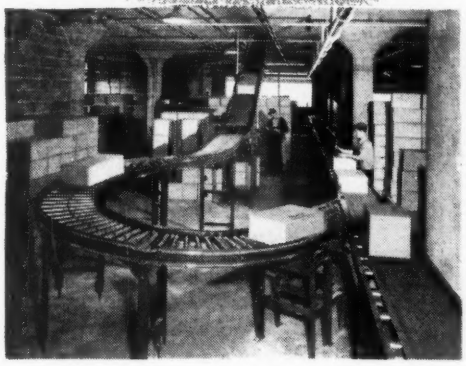


CARTON "FLATS" IMPRINTER

Industrial Marking Equipment Co., New York, announces a new automatic imprinting machine for use on flat cartons, designed to eliminate hand stencilling on production runs. It can imprint 2,400 cartons per hour, according to the company, which also makes a unit for imprinting loaded cartons, cases or boxes.



no two conveying problems are alike!



that's why YOU need the

FINGERPRINT

ENGINEERING

that comes with

ALVEYORS*

the word for every conveyor need

There are many possible layouts for moving cases, cartons and units of merchandise from one operation...and from one department ...to another. But for one individual plant there is one best, most efficient, economical way. As no two fingerprints are alike... so is your plant different from the others! Alvey Conveyor Mfg. Co.'s experience throughout industry...with well-known installations from coast to coast...speaks for Alvey flex-ABILITY...for Alvey's fingerprint approach to every conveying problem.

*Trademark

ALVEY CONVEYER MFG. CO., 3205 S. Broadway, St. Louis 18, Mo.

EVENFLO
ANILINE PRINTING ROLLS

—AUTOMATICALLY METER THE INK FOR BEST RESULTS

EVENFLO eliminates ink waste, poor quality runs and rejects due to improper inking...saves money on every job.

The new Evenflo engraved ink-metering rolls make tedious, time consuming adjustments unnecessary. Ink is fed in the exact quantity necessary for fine presswork, continuously and automatically. No ink is wasted, no press time lost, less printing stock is spoiled due to irregular inking. Evenflo is the one sure way to better printing and reduced costs.

★ ★ ★

PRESS BUILDERS—Improve your aniline presses by installing Evenflo metering rolls as original equipment. Prices will be sent on receipt of your blueprints or sketches.

QUICK DELIVERY ON *ALL TYPES* OF ANILINE ROLLS

Plate, impression or special aniline rolls can be supplied promptly on order. Ask for an estimate on any or all the rolls in your press. Quotations will be furnished without obligating you in any way.

EVENFLO
HAND PROOFER
—the handy way to test color and coverage

No need to set up a machine for testing ink. Quick as a wink, Evenflo Hand Proofer produces an *exact* sample. Keep these time and money savers on hand in your plant. Interchangeable Evenflo rollers make it possible to test with a roll that matches the one in your press or test for presses equipped with other than Evenflo rollers.

EVENFLO *PRODUCT OF*
PAPER MACHINERY and RESEARCH, Inc.
1014 OAK STREET, ROSELLE, NEW JERSEY

Builders and designers of paper converting machinery, aniline printing equipment, tension devices and custom mechanical specialties.

Plants and People

The officers of the **Package Machinery Co.** of Springfield, Mass., and **Frank D. Palmer, Inc.,** of Chicago, mutually announce the merger of their companies, subject to ratification by the stockholders. The Palmer organization will become a division of Package Machinery Co. Package Machinery makes wrapping machines and Frank D. Palmer builds general packaging machinery, specializing in continuous-motion carton-forming equipment. The key personnel of the Palmer organization will become members of the Package Machinery Co.'s organization. **Frank D. Palmer,** the founder of the business, will remain in an advisory capacity and **Charles E. Palmer** will become vice president in charge of the Palmer division. The sales staffs of both companies will continue unchanged, each specializing in its particular field. The merger, it is expected, will result in a broader and better service to the packaged-goods industry.

The American Can Co., New York, announces the following promotions: **Dudley W. Figgis,** president of the company since 1943, has been named chairman of the board, follow-

D. W. Figgis

C. H. Black

W. C. Stolk

L. W. Graaskamp

ing the retirement of **Maurice J. Sullivan; Carl H. Black,** formerly executive vice president, is president; **William C. Stolk,** vice president in charge of sales, is executive vice president; **L. W. Graaskamp,** former general manager, is vice president in charge of sales.

The Gardner-Richardson Co., Middletown, Ohio, has changed its name to **The Gardner Board & Carton Co.** The change in name, which more accurately describes the firm's activities, does not affect its personnel or policies.

Bruce H. Clary has been named vice president and director of the **Bareco Oil Co.,** Tulsa. Mr. Clary will continue in charge of wax sales.

Walter N. Wilhelm has been promoted to sales manager of the Chicago district of **The Dobeckmun Co.** Manager of the newly created central division at St. Louis, Mo., is **B. F. Kinter.** Four new appointments also have been announced recently by Dobeckmun: **Albert W. Thornton, Robert A. Stump, W. C. Dougan** and **Harvey V. Lawson** have been named sales representatives of the St. Paul-Minneapolis, Kansas City, Pittsburgh and Chicago districts, respectively.

The Shaw-Randall Co., Pawtucket, R. I., fabricators of paper and paperboard die-cut specialties, announce the purchase of all equipment and facilities of the **P. B. Kellogg Container Division** of the **U. S. Envelope Co.** for the fabrication of rigid transparent containers. Equipment is being moved to Pawtucket. U. S. Envelope will continue to produce flexible packaging.

Carl R. Megowen, vice president and director of **Owens-Illinois Glass Co.,** Toledo, has been elected executive vice-president; **Hugh C. Laughlin, Harry J. Durholt** and **Raymon H. Mulford,** vice presidents; **F. M. Canter** of the American Coating Mills Division and **A. H. Ahlers,** assistant secretaries. **Leland S. Connick** is now assistant general sales manager and **Huntley Castner** is manager of the San Francisco branch.

C. R. Megowen

Announcement has been made of the formation of the **General Container Corp.,** a New York firm chartered to sell, manufacture and license the plastic packaging inventions of **Harry F. Waters.**

J. A. Rainier, senior partner of **J. A. Rainier & Co.,** will be president and administrative head of the new company. The board of directors includes **F. D. Gottwald, Albemarle Paper Co.; Archibald Graustein,** formerly with **International Paper Co.; Paul V. McNutt; David T. Robinson; Walter B. Sheehan, Missisquoi Paper Co.** and **Fonda Container Corp.; Charles R. Stevenson** of **Stevenson, Jordan and Harrison.**

R. E. Hospes has been named assistant chief chemist of **Aluminum Seal Co., Inc.,** Richmond, Ind.

The Forbes Lithograph Mfg. Co., Boston, Mass., has elected **Robert M. Lawrence,** manager of the New York office, a vice president.

Clifford K. Wilson has been named manager of **Food Machinery & Chemical Corp.'s Sprague-Sells Division,** Hoopeston, Ill., to succeed the late **Neal S. Sells.**

Fuchs & Lang Mfg. Co., division of **Sun Chemical Corp.,** has moved its offices to the Sun Chemical Bldg., 10th St. and 44th Ave., Long Island City, N. Y.

George W. Ross has been named general sales manager of **H. P. Smith Paper Co.,** Chicago, to succeed **E. P. Schoenthaler,** who has resigned.

The Saniwax Paper Co., Kalamazoo, Mich., manufacturers of waxed paper, have appointed **Harold L. Bills,** former sales manager, as vice president in charge of sales, and **Frederick R. Braden** as assistant treasurer.

The Avery Adhesive Label Corp., Monrovia, Calif., has opened factory branch offices in Philadelphia and Cincinnati. **Michel Hamaty** is in charge of the Philadelphia office and **R. F. Brumfield** is manager at Cincinnati.

Quentin Fiore, specializing in lettering and calligraphy, has moved to 148½ E. 40th St., New York.

C. & A. Holweg, Strasbourg, France, manufacturers of bag-making machines, announce the formation of **Holweg-**

NO ICE REQUIRED for Fresh Seafood Shipments

One of the most significant packaging developments in the last decade is the H & D INSULPAK*, a corrugated box in which coast-to-coast airborne shipments of pre-cooled foods are made possible—*without* refrigeration. INSULPAK now makes all America a vast potential market for seafoods of all kinds. Daily delivery of fresh, perishable foods everywhere is now accomplished by this new, insulated package. It is hoped that it will soon be available for wide-scale distribution.

This Shipping Box TELLS and SELLS

Here's the famous Duplex shipping-display box developed by H & D for those manufacturers who wish to display their products—effectively and economically—at point of sale. It's a regular corrugated shipping box which the dealer opens to form a colorful counter display with a sales message that attracts attention and makes people buy. The H & D Duplex shipping-display box protects your product in shipment—sells your product in the retail store.

Good Packaging MAKES GOOD PRODUCTS BETTER

H & D PREPAK* Increases Unit of Sale

Many items, such as china and glassware, can be prepared at the factory into selling units that step up sales. Instead of selling one item at a time, Prepak* sells six, eight or twelve. Prepak promotes "take with" purchases, needs no repacking. The package illustrated contains a set of 8 glasses. It is made of light blue embossed corrugated board, printed in two colors, red and dark blue.

*REG. U. S. PAT. OFF.

REG U. S. PAT. OFF.
H&D
BOXES

FOR MORE INFORMATION, WRITE

HINDE & DAUCH

Authority on Packaging

Executive Offices: 4906 Decatur St., Sandusky, Ohio

FACTORIES IN:

Baltimore 13, Md. • Buffalo 6, N. Y. • Chatham, Ontario
Chicago 32, Illinois • Cleveland 2, Ohio • Detroit 27, Mich. • Gloucester, N. J. • Hoboken, N. J. • Kansas City 19, Kansas • Lenoir, N. C. • Montreal, Quebec
Richmond 12, Va. • St. Louis 15, Mo. • Sandusky, Ohio
Toronto, Ontario • Watertown, Mass.

SALES SLIPPING?

Package your products in Weinman TRANSPARENT Plastic Cans or Boxes and watch your volume rise!

From washers to orchids—from toys to candy—manufacturers report increased sales when they package the transparent way.

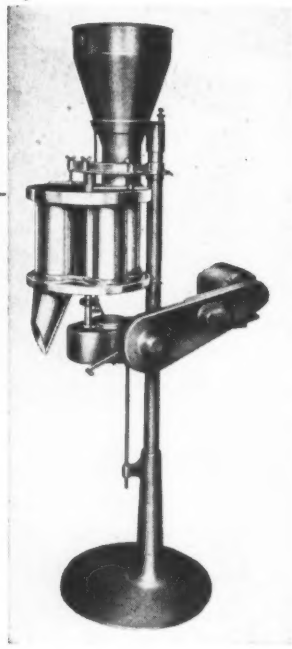
Also mfrs. of a new line of lithographed tins in stock patterns.

WEINMAN BROTHERS Incorporated

3260 W. Grand Ave.
Chicago 51

Experienced Representatives write

FILLMASTER VIBRATORY FILLER
(HEAVY DUTY)



Nationally known firms have chosen this unit because of the trouble-free vibratory feature which improves their weight accuracy and filling speed on dry and semi-dry products, such as cereals, candies, pop corn, nut meats, bread crumbs, seeds, spices, tea, coffee, (all grinds), powders, cake mixes, fresh and frozen peas, etc.

Gram fraction to 10 pounds
3 to 120 fills per minute
No bridging
No breakage of delicate products
Inexpensive
Noiseless

Also available:
Product Settling Table
Automatic Container Feeder Attachment

STUYVESANT ENGINEERING CO.
107 Stuyvesant Avenue Lyndhurst, New Jersey
REPRESENTATIVES IN PRINCIPAL CITIES

Plants and People
(Continued)

U.S.A., Inc., at 4614 Prospect Ave., Cleveland, Ohio. **Bagprint Machinery Corp.,** Royal Oak, Mich., has been appointed exclusive distributor in the United States of all Holweg paper and cellophane bag-making machines, aniline printers and paper converting equipment.

The Dow Chemical Co., Midland, Mich., announces the following promotions: **Donald Williams,** formerly general sales manager, is now director of sales, succeeding **Leland I. Doan,** newly elected president; **Donald K. Ballman,** former

Left to right, Donald Williams, D. K. Ballman, and Dr. L. S. Roehm.

assistant general sales manager, succeeds Mr. Williams as general sales manager; and **Dr. L. S. Roehm** is now assistant general sales manager. Dr. Roehm will continue to head Dow's Technical Service and Development Division.

The Federal Adhesives Corp., Brooklyn, has opened branch offices in Philadelphia, Cleveland and Boston. **Harry T. Baraff** is in charge of the Philadelphia office, **William Schoenberg** heads the Cleveland office and **Roger M. Bakey** is in charge at Boston.

The St. Regis Paper Co., New York, announces that it has placed in operation new four-color printing presses—designed by **Edwin E. Burroughs,** chief engineer of the St. Regis Multiwall Bag Division, and constructed at the company's machine and engineering plant at Oswego, N. Y.—which are said to enable faster printing on kraft paper and to enhance the appearance of label copy on multiwall paper bags. Two Burroughs presses are in operation at the St. Regis, Pensacola, Fla., bag plant and a third is being installed at the company's new San Leandro, Calif., plant. Five more presses are under construction.

National Waterproof Papers, Inc., announces the transfer of its **Crepe-Kraft Co. Division** to Camden, N. J., where all manufacturing activities will be concentrated. Mailing address is Front & Beckett Sts., Camden.

Lippincott & Margulies, Inc., New York design firm, has appointed **Robert Weston** as account executive to service packaging, product development and interior design.

C. F. Bonnet has been appointed production manager of **American Cyanamid Co.'s Industrial Chemical Division. G. W. Russell** is assistant sales manager.

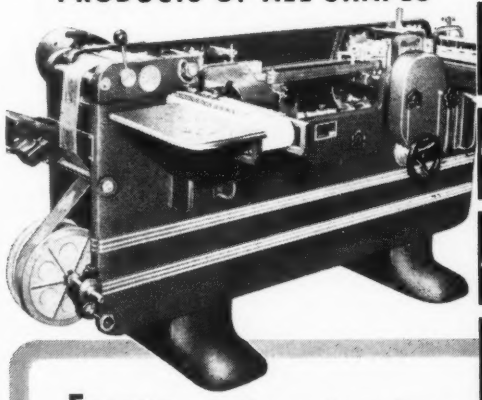
Reynolds Metals Co., Louisville, Ky., has appointed **A. L. Lippitt** as products manager of Alnesium cases, a recently introduced product for the bottling industry.

Dr. C. F. Roos, packaging economist, has opened consulting offices at 816 Fifth Ave., New York.

The board of directors of **Crown Cork & Seal Co., Inc.,** has made the following promotions: **Charles H. Griesacker**

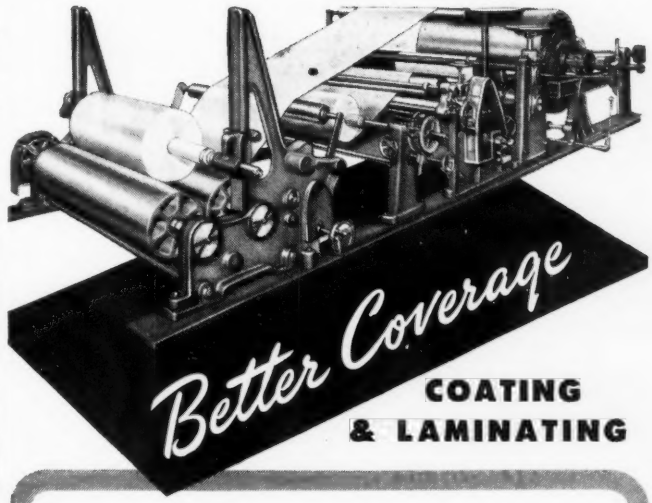
Packages—

PRODUCTS OF ALL SHAPES



FRAGILE or solid — regular or irregular, this modern continuous feed wrapper delivers up to 150 units per minute, fully glued or heat sealed — and without breakage! Only one operator and one helper required. Also available with hopper feed for cylindrical products such as stick candy, etc. Saves time, money, labor and materials. *Write for illustrated brochure and details.*

Campbell
WRAPPER
HUDSON-SHARP MACHINE CO • GREEN BAY • WIS



No. GL-2, illustrated, is an all-purpose, heavy duty machine that is adaptable to any type laminates required. The open design construction permits easy installation of varied applicators for pastes, glues, waxes or asphalts. Assemblies may be rearranged, new ones added or subtracted, according to sheet leads required. Write for complete detailed information.

HUDSON-SHARP
MACHINE CO • GREEN BAY • WIS

Granted!
The glossy finish on your labels as they come to you from the print shop is just swell...

But...
how about ? ? ? abrasion in shipment??

If they show scuffing and dirt... you need

PYROXCOTE
finish for labels
(applied from solution to sheets or webs)

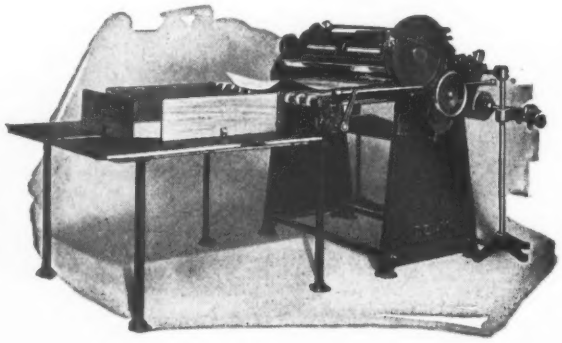
If you want abrasion-resistant labels, let us send you a list of label printers who apply Pyroxcote. If you make labels, you can apply it, or we'll supply a list of custom finishers who do.

PYROXYLIN PRODUCTS, Inc.
CHICAGO 32, ILL.

Sheet Cutting on your BECK

The Beck Sheet Cutter cuts everything from cellophane to light board, increases production, sizes accurately and needs only part time supervision by an unskilled operator. Electric eye feature available for register control.

Avoid cutting charges. Have the right size sheet always on hand with a Beck Sheet Cutter. Thousands sold to packers. Write.



CHARLES BECK MACHINE CORPORATION
13th & Callowhill Streets, Philadelphia 8, Pa.

Packard Presents...
LOW COST FRICTION CLOSURES

Newly developed machinery enables Packard to fill your requirements for metal end, paper body containers with friction plug closures fast, and at substantially lower cost than ever before. Friction closures are wonderful for every sort of granular or powdered product. They are easy to open, simple to re-seal.

A special Packard variation of the friction-closed container consists of a center divider in the tube with closures at both ends. This allows the unit packaging of two items which must not intermix until used.

If you are interested in Packard's low cost metal end containers with friction plug closures or any other type of closure, we'd like to hear from you. Please write.

Packard Container Corp.

222-232 Grand St. Hoboken, N. J.
Phone Hoboken 2-1970 N. Y. C, Phone Whitehall 3-0684

Plants and People
(Continued)

to vice president and assistant secretary; **Walter L. McManus** to vice president and secretary; **Cover B. Newman** to treasurer and assistant secretary; **Lowell H. Smith** to assistant vice president and assistant secretary; **Elmer F. Fousek** to assistant secretary and assistant treasurer.

W. Bayard McCoy, formerly sales promotion manager of the Rochester division of **Stecher-Traung Lithograph Corp.,** Rochester, N. Y., has been promoted to sales manager to succeed **Frederick C. Herzog,** who has retired.

W. B. McCoy

National Pallet Corp., Pittsburgh, manufacturer of wooden pallets and skids, has appointed three new representatives: **Gallrein & Towne,** Dallas and Houston, Tex.; **Ohio Equipment Co.,** Cleveland, Akron and Mansfield, Ohio; **E. J. Farrell & Co.,** Buffalo and Rochester, N. Y.

G. J. Heim, formerly with Milprint, Inc., has joined **Merchandising Displays, Inc.,** Milwaukee, as director of design. **R. A. Buechner** is Wisconsin representative.

Bernardin Bottle Cap Co., Inc., Evansville, Ind., makers of closures since 1881, have transferred their operations to a modern new plant. Constructed along lines following the

latest ideas in industrial layout and building, the new building is equipped with engineering and research facilities for testing all phases of cap production and usage.

The Bruce Carton Co., Memphis, Tenn., has been reorganized as a Tennessee corporation, replacing the partnership previously organized by **Jay C. Bruce** and **Parker Bruce. The Central Fibre Products Co.,** Chicago, manufacturers of paper boxboard, produce house supplies and egg-packing material, have purchased a stock interest in the company. Jay C. Bruce continues as president.

Chippewa Paper Products Co., Inc., has appointed **Jules E. Timer** as sales manager. Mr. Timer will introduce a flexible corrugated sheet for protective packaging to be distributed through paper merchants.

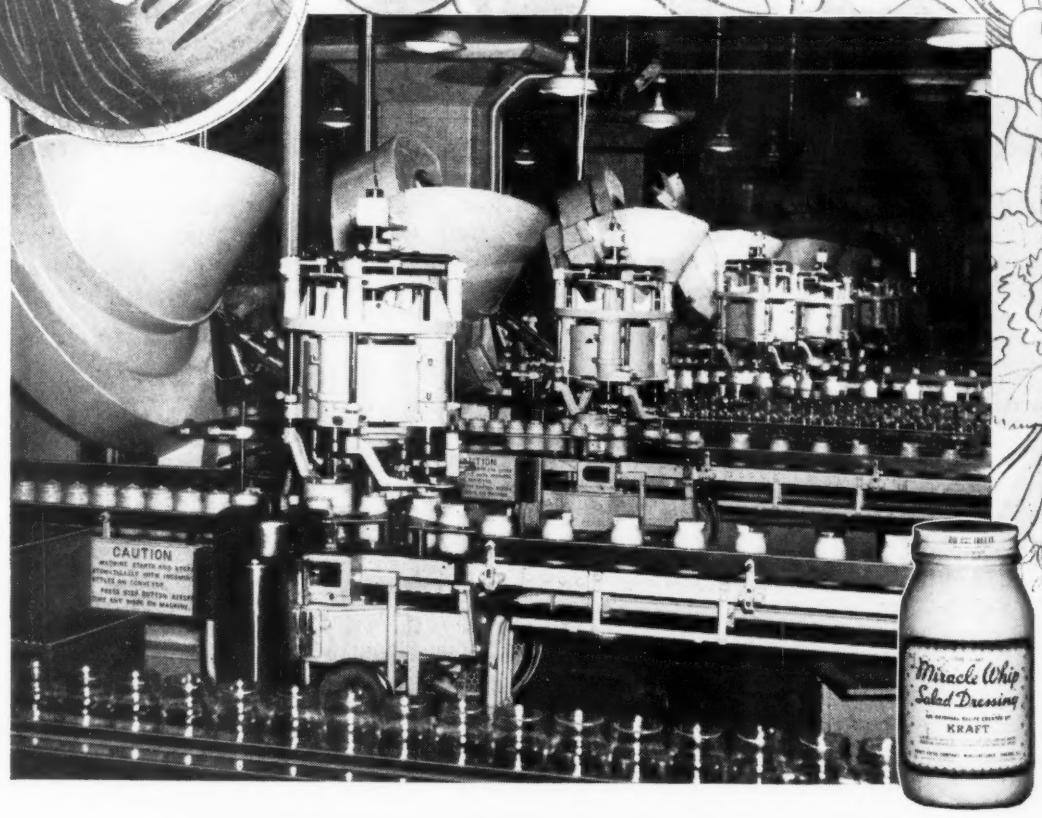
Einson-Freeman Co., Inc., Long Island City, New York, reports that it was deluged with requests for copies of the "RCA angel," part of a Christmas point-of-sale display which it manufactured for RCA Victor records, following an offer to fill such requests in an ad in MODERN PACKAGING. A total of 1,073 readers wrote in, and company officers and salesmen were swamped with personal requests from customers and prospects who had seen the ad. "Who says they don't read trade papers?" asks Albert Hailparn, executive vice president and director of sales at Einson-Freeman.

A. G. Costello, president of **Container & Closure Sales, Inc.,** Chicago, died on April 14. Mr. Costello was 64.

BACK OF TODAY'S

Best dressed salads

MIRACLE WHIP SALAD DRESSING
IVANHOE
PREMIER
KINGTASTE
CAIN'S
HELLMANN'S
DUKE'S
GOLDEN BRAND
MRS. SCHLORER'S
FINAST
BEST FOODS
McCORMICK'S
TANG
LAURA SCUDDER



Battery of Pneumatic 4 Head Rotary Cappers in operation at Chicago plant of Kraft Foods Company.

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PNEUMATIC

PACKAGING AND BOTTLING MACHINERY

For Your Information

A. S. Daniel of W. C. Ritchie & Co. was elected president of the **National Paper Box Mfrs. Assn.** at the recent annual meeting in New York. Vice president is **Douglas T. Neale** of E. J. Schoettle Co., Inc. **Henry J. Aemisegger** of G. A. Bisler, Inc., was elected treasurer. New directors are: **Walter P. Miller, Jr.,** Walter P. Miller Co. (Central Division); **C. Knowlton Shaw,** Shaw Paper Box Co. (New England Division); **T. Harry Lang,** Newark Paper Box Co. (Eastern Division); **William Price,** Carolina Paper Box Co. (Southern Division); **F. William Koehl,** The William Koehl Co. (Western Division), and **W. C. Field,** Fleishhacker Paper Box Co. (Pacific Coast Div.).

The Lithographic Technical Foundation, at a special meeting last month commemorating its 25th anniversary, elected the following directors: **Hugh R. Adams** of Roberts & Porter, Inc., **Lorne B. Campbell** of Montreal Litho Co., **R. E. Damon** of Atlanta Litho Co., **William Hogan** of Miehle Printing Press & Mfg. Co., **George C. Kindred** of Kindred, MacLean & Co. and **Engelbert Smith** of Crescent Ink & Color Co. The directors elected the following officers for the coming year: **George Schlegel, III,** president; **Harry E. Brinkman,** vice president; **George C. Kindred,** treasurer; **Ralph D. Cole,** secretary; **Don H. Black, Frank A. Myers, Ralph J. Wrenn** and **Messrs. Brinkman, Cole** and **Kindred,** members of the executive committee. **Stanley Kukla** was elected to fill the unexpired term of **C. Albert Nordberg,** who resigned as a director. The foundation's by-laws were amended so that annual meetings will be scheduled in the future for the first Tuesday in February. **Charles Shapiro** was selected to serve as the foundation's executive director during a six-month leave of absence requested by **Wade Griswold.**

Randolph T. Ode, president of The Providence Lithograph Co. was elected president of the **Lithographers National Assn.** at their recent annual meeting. New vice president of the association is **E. W. Jackson,** president of The Steck Co. Re-elected as chairman of the board was **Maurice Saunder** and as treasurer **George C. Kindred. W. Floyd Maxwell** and **Edward D. Morris** were reappointed executive director and secretary, respectively. The following were elected directors: **Harrison Chandler, R. E. Damon, S. S. Kauffman, Leonard H. Knopf** and **Charles Waldhauer. William H. Walters,** president of U. S. Printing & Lithograph Co., was elected a director to replace **Joseph P. Thomas,** deceased.

The central division of the **National Paper Box Mfrs. Assn.** is planning a conference Sept. 16 to 18 at Shawnee Inn, Shawnee-on-Delaware. Speakers announced are **Ermin Ruf** of the Wayne Paper Box & Printing Corp., **Edward Dillard,** Old Dominion Box Co., and **Walter P. Miller, Jr.,** of the Walter P. Miller Co. **Douglas T. Neale,** Edwin J. Schoettle Co., is chairman of the central division.

The Freight Loading and Container Section of **Assn. of American Railroads,** Chicago, has copies of its poster No. 11, "Assembly and Loading of Lettuce and Vegetable Crates Containers Nos. 926, 929 and 930," available without cost by writing George H. Ruhle, secretary, 59 E. Van Buren St.

The American Society for Testing Materials will hold its annual meeting at the Chalfonte-Haddon Hall Hotel, Atlantic City, the week of June 27. A.S.T.M. technical committees will complete current work on specifications and tests and initiate new research and standardization work.

A series of concise factual articles covering the recommended method for packaging particular products or commodities using Pliofilm is being assembled in a ring-binder book by The **Goodyear Tire & Rubber Co., Inc.,** Akron, Ohio. Entitled, "Pliofilm Pac aging Briefs," the first series, now available from the company, covers 25 products. Copies may be had on request to the firm.

The Champlain Co. is offering a comprehensive instruction manual on commercial rotogravure printing and presses. Titled "Gravure," the booklet was prepared by the Technical Trade School of the International Printing Pressmen and Assistants' Union of North America at Pressmen's Home, Tenn., where it is used as a textbook. Copies may be obtained by writing the company at 88 Llewellyn Ave., Bloomfield, N. J.

The Taber Instrument Corp. has just published a new general bulletin, "Taber Plastic Fabricating Machines." Copies may be obtained by writing the company's Plastic Machine Division, 111 Goundry St., N. Tonawanda, N. Y.

A sample book of absorbent papers such as 20-lb. tissue which have been printed with Hydrotone inks by aniline or rotogravure process has been made up by **Bensing**

What's doing

June 12–16—**National Assn. of Retail Grocers** and **National American Wholesale Grocers' Assn.,** mid-year meeting, Chicago.

June 20–21—**National Retail Dry Goods Assn.,** Merchandising Division Convention, Hotel Statler, New York.

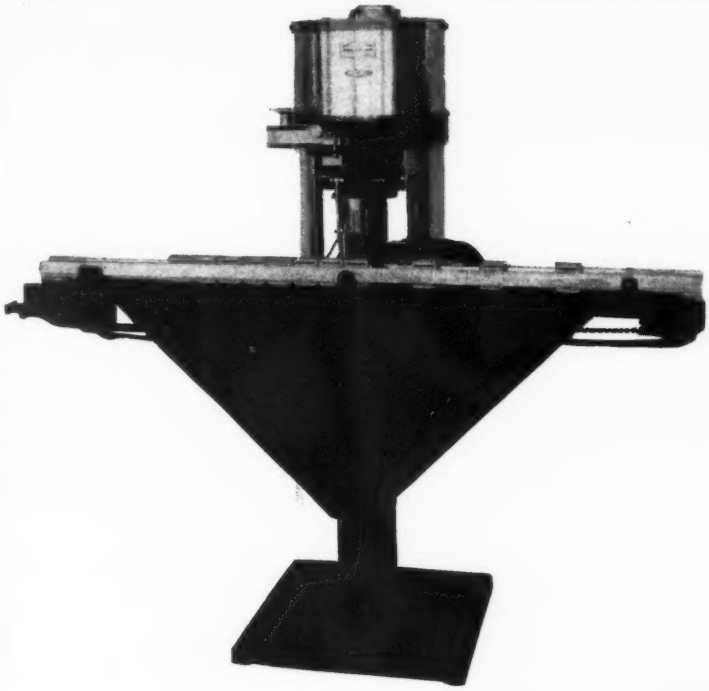
June 20–22—**National Assn. of Purchasing Agents,** annual convention, Stevens Hotel, Chicago.

June 27–30—**American Society For Testing Materials,** Chalfonte-Haddon Hall, Atlantic City.

June 27–July 1—**New York Lamp Show,** Hotel New Yorker, New York.

July 10–15—**Institute of Food Technologists,** 9th Annual Convention, San Francisco.

July 10–15—**National China, Glass & Pottery Show,** Hotel New Yorker, New York.



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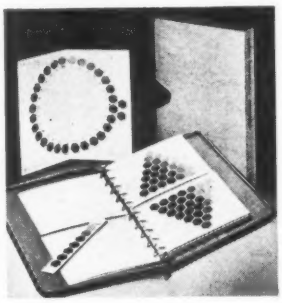
For Your Information
(Continued)

Bros. & Deeney, manufacturer of the inks. Request copies from the company, 401 N. Broad St., Philadelphia.

The third edition of the "Color Harmony Manual," has been published by the Color Standards Dept., **Container Corp. of America,** Chicago, in handy loose-leaf form. The manual has 943 colors—an increase of 263. Based on the Ostwald color theory, some of the original 680 colors have been repositioned to provide a better representation of the theory. The manual, including a circle chart with 30 duplicate *pa* hue chips, one adjustable gray scale and the text, costs $113.38.



Manufacturers interested in new products in order to maintain production and diversify lines will be interested in the **U. S. Department of Commerce's** new publication "Developing and Selling New Products—A Guidebook for Manufacturers," prepared by Gustave E. Larson of the Marketing Division. There is a section on "Packaging and Naming the Product." The publication, priced at 25 cents a copy, may be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., or Commerce Dept. field offices.

The American Type Founders' new Klingrose Division, manufacturing web-fed gravure presses, has prepared and is offering a pocket-sized booklet, "Cylinder Calculator," whereby gravure layout men can ascertain instantly the exact cylinder diameter for any known circumference. Copies may be obtained without charge on request to the firm, 200 Elmora Ave., Elizabeth, N. J.

The Oxford Paper Co. is offering a new guide, "Oxford Paper Selector Chart," to help select the right paper for a specific job. It should be a helpful reference for anyone concerned with printing and lithography in the packaging field. Copies may be obtained from Oxford dealers or by writing the firm, 230 Park Ave., Dept. P10, New York.

Of particular interest to lithographers doing label work is a section devoted to offset gloss inks in the new catalog, "Color Selector," published by the **Howard Flint Ink Co.,** Detroit, Mich.

A brochure on the history, development and properties of Plaskon molding materials, "Plaskon Molded Color," has just been released by the **Plaskon Division** of **Libbey-Owens-Ford Glass Co.** The division has also published "Alkyd Hot Molding Compounds," written by Dr. Maurice H. Bigelow, technical director, and "Plaskon Handbook," a compilation of technical and descriptive material. Copies may be obtained from The Plaskon Magazine, LOF, 2112 Sylvan Ave., Toledo.

The 1949 edition of **"The Paper Year Book,"** now available, consists of 592 pages and presents detailed informa-

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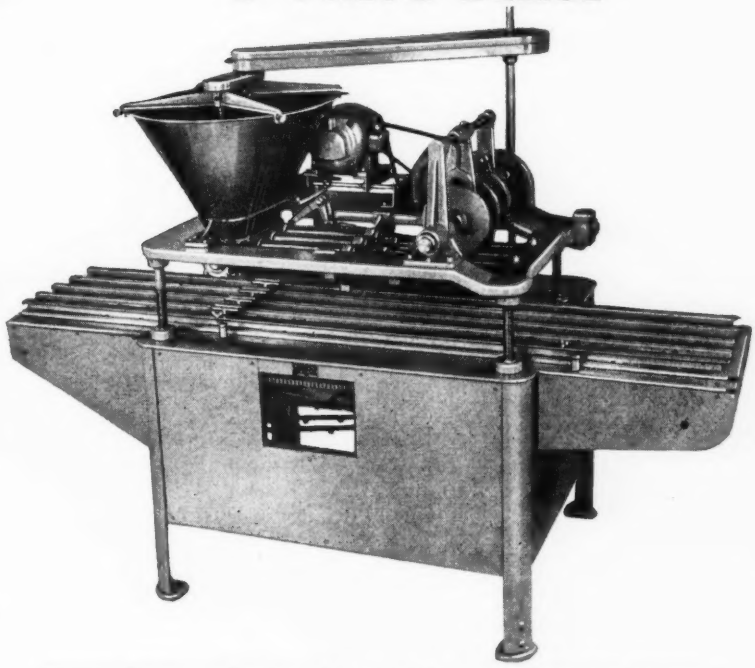

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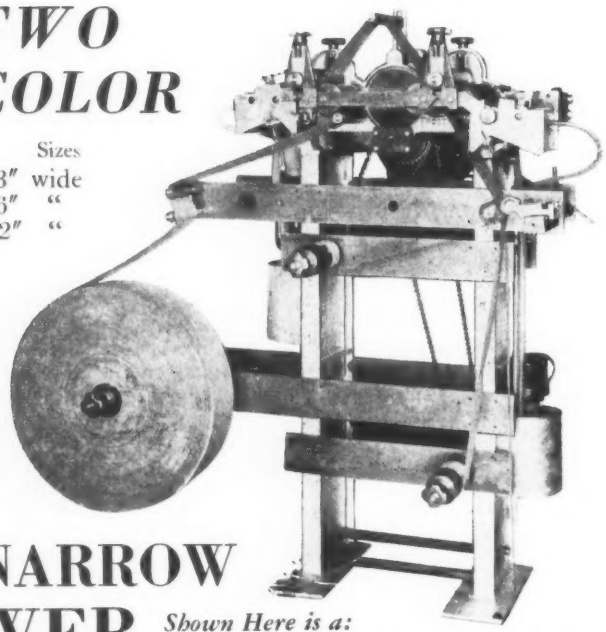

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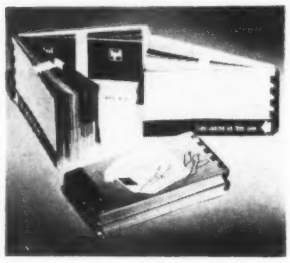
For Your Information
(Continued)

tion on over 1,000 different papers and paper products. It contains more than 700 photographs and 100 charts. This seventh edition includes for the first time a division devoted exclusively to printing and fine papers. Priced at $10, copies may be secured from the publisher, Davidson Publishing Co., Chicago.

International Printing Ink has introduced the "Color Guide for Boxboard," prepared especially for package printers, designers and production men. IPI offers this pocket-sized guide free to package printers and other ink users. Requests may be made direct to International Printing Ink, Division of Interchemical Corp., 350 Fifth Ave., New York, or any IPI branch office.



The Office of Technical Services of the **U. S. Dept. of Commerce,** Washington, announces the availability of a subject index to technological documents issued in Vol. X, covering July through September, 1948, of the *Bibliography of Scientific and Industrial Reports,* priced at $1.

Robert Spector Co., New York, supplier of pressure-sensitive tapes, has published a complete catalog on types of these tapes with an informative description of their uses and applications. Copies of "Catalog of Scotch and Industrial Pressure-Sensitive Tapes and their Uses" may be had from the company, 22 Park Place.

The research department of **Continental Can Co., Inc.,** has published "Storage of Canned Foods," a 31-page informative booklet (Bulletin No. 17). Copies may be secured from the firm, 100 E. 42nd St., New York.

"Printing & Promotion Handbook," by **Daniel Mecher** and **Nancy Larrick** contains information on how to plan, produce and use printing, advertising and direct mail. Published by McGraw-Hill Book Co., Inc., New York, the book is priced at $6.

"How To Stack and Load Corrugated Shipping Boxes," **The Hinde & Dauch Paper Co.'s** second booklet in its Little Packaging Library Series, is available in a revised edition. Requests should be addressed to the company at Sandusky, Ohio.

An interpretation of the Ostwald color theory, written by **Egbert Jacobson** and entitled "Basic Color," has been published by Paul Theobald & Co., Chicago. The retail price of the book is $14.75.

A guide of electric and electronic counting instruments, scalers, counter chronographs and special electronic frequency measuring and computing equipment has been published by **Potter Instrument Co., Inc.** Copies may be had from the firm, 136 Roosevelt Ave., Flushing, N. Y.

The Plastics Department of **American Cyanamid Co.** has just published a 12 page booklet describing its line of molding materials, copies of which may be obtained on request to the company, 30 Rockefeller Plaza, New York.

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In developing their new whistling bobber, the W. J. Jamison Co. of Chicago required a tube that would be colorful and light in weight, yet strong, rigid and unbreakable.

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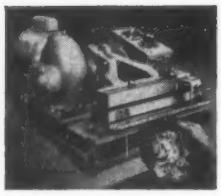
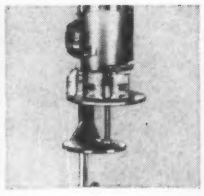
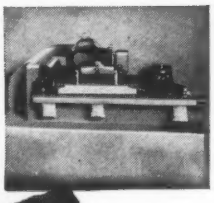

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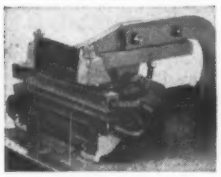
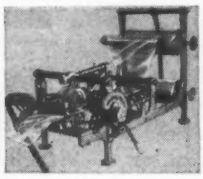
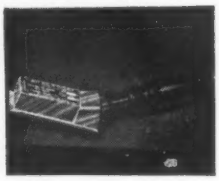

RESINA Cappers

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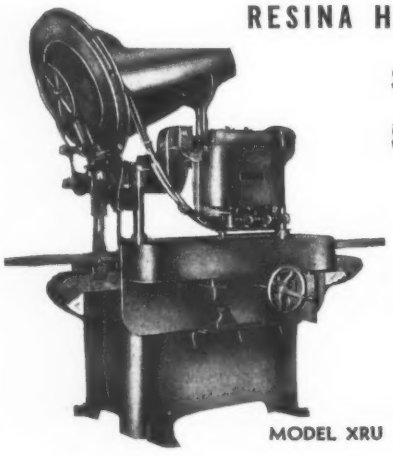
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U.S. Patents Digest

Edited by H. A. Levey

This digest includes each month the more important patents which are of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps are not accepted.

Rubber-Coated, Resin-Saturated Sheet and Process of Making the Same, E. R. Dillehay (to The Richardson Co., Lockland, Ohio). U. S. 2,464,783, Mar. 22. The method of forming a rubber-coated, phenolic-resin sheet which consists in saturating a fabric with the phenolic resin capable of curing at low temperature.

Folding Box, H. A. Tomarin, Cincinnati, Ohio. U. S. 2,464,904, Mar. 22. A container comprising a body portion including front, rear, bottom and side panels and having attachment flaps set apart by fold lines and inturned wings for interlocking walls which provide a five-sided, open-topped body portion and a cover member including top panel which is connected to same.

Container-Labeling Machine. T. Paisley, Ferndale, Mich. U. S. 2,464,937, Mar. 22. A container-labeling machine including a pair of rollers to support a container during rotation on its axis, a pressure roller movable into engagement with a container and a label feeding means adapted when actuated to feed a label between the container and one of rollers.

Apparatus for Making Bags. H. F. Shumann, Pittsburgh, Pa. U. S. 2,465,044, Mar. 22. A bag-making machine comprising: means for advancing a web of material intermittently, means for splitting web into a plurality of strips each of proper width to form a tube, a plurality of tube-forming mechanisms in side by side relationship and each comprising a pair of gusset-tucking plates, severing means for length of each tube and means for simultaneously sealing the remaining end of each tube.

Packing Cord, N. I. Fleischer (to The Fleischer Mills, Inc., Cincinnati, Ohio). U. S. 2,465,081, Mar. 22. A packing cord comprising a fibre core, layers of crepe sheeting crumpled and compressed around core and a braided jacket securing sheeting.

Safety Device for Fluid Containers, R. W. Harvey, Kingston, N. Y. U. S. 2,465,095, Mar. 22. Apparatus for confining fluids escaping from a container, same comprising a cap having a flexible membrane sealed thereto, extending inwardly of cap.

Packing Device for Annular Articles, W. A. Ringler (to The Gardner-Richardson Co., Middletown, Ohio). U. S. 2,465,121, Mar. 22. A packing and merchandising device for perforated articles comprising a tubed structure formed of flexible material, having a plurality of body walls in articulation, a spaced pair of walls having articulated flaps at their ends and another spaced pair of walls extending substantially beyond the ends of first-mentioned pair of walls, so that upon erection of the tubed structure and bending over of flaps, a packing device is provided having a relatively rigid body adapted to extend through the article.

Composite Package, L. L. Salfisberg (to Ivers-Lee Co., Newark, N. J.). U. S. 2,465,172, Mar. 22. A package comprising an envelope formed of opposed layers of thin flexible material having a commodity compartment between them and a relatively thick and stiff backing sheet.

Folded Carton Opener, S. H. Berch, Beverly Hills, Calif. U. S. 2,465,189, Mar. 22. A device for opening folded cartons, same being a flat-faced structure with a pair of spring finger plates secured thereto and projecting at right angles from the face, said finger plates being disposed with their flat faces parallel and in spaced relation to each other a distance slightly greater than the width of the carton.

Container Cap, L. H. Rohde and J. E. Underwood (to The West Co., Philadelphia, Pa.). U. S. 2,465,269, Mar. 22. A container cap formed of soft metal and having a circular top and a peripheral flange by which the cap is adapted to be secured to a container, top comprising annular portion and removable disk.

Fibreboard Shipping Container, S. B. DeMian, Chicago, Ill. U. S. 2,465,324, Mar. 29. In a fibreboard shipping container the combination of a walled body and a preformed pivoted cover hingedly supported on walled body, body including a plurality of wall sections, each of which has a rim along the upper edge

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At Central States, every package is custom-designed... no matter how simple or complex.

Even a single wall paper bag, for example, is put into production only after samples and tests in actual use have shown it to provide the maximum usefulness at lowest cost.

Our patented Ham Bag illustrates how designing skill can add utility to a product. Replacing conventional wrappings that required three separate sheets, the Ham Bag has more eye appeal, is quicker to use and is saving money for meat packers.

Your product can benefit from Central States' packaging experience. We can "engineer" a paper bag, an acetate Showbox* or a Showbag* of polyethylene, cellophane or Pliofilm to meet your exact needs.

Let our Design Group help you with your packaging problem!

*Showbox and Showbag are trade names of Central States Paper & Bag Co.

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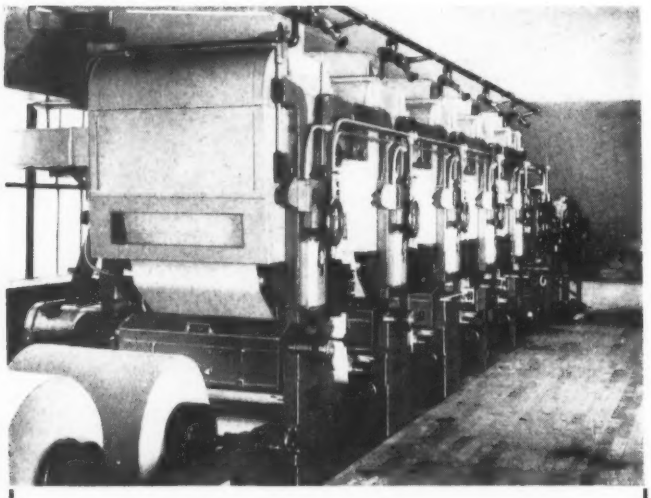

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U.S. Patents Digest
(Continued)

thereof, one wall having a plurality of longitudinal slots in rim and said preformed cover having a plurality of tab hinges corresponding in number to rim slots.

Collapsible Box, D. B. Hartman (to Owens-Illinois Glass Co., Toledo, Ohio). U. S. 2,465,588, Mar. 29. A box formed of a single sheet of flexible material including a rectangular bottom, sides extending upward and corner members, the upper edges adjacent to same, said sides having flaps which fold in.

Sack and Bag Seal and Fastener, J. T. Greenslade, Victoria, British Columbia, Canada. U. S. 2,465,646, Mar. 29. A bag having end portions adapted in closing the bag to be folded one upon the other into a position substantially normal to the sides of the bag, end portions being provided with a plurality of openings adapted to register when end portions are folded in position, a flap within the mouth portion of the bag secured below the foldable end portions along one longitudinal edge only to a side of the bag, flap being adapted to underlie end portions when folded.

Collapsible Hexagonal Container, W. A. Ringler (to The Gardner-Richardson Co., Middletown, Ohio). U. S. 2,465,661, Mar. 29. A tubular hexagonal carton formed of a single paperboard blank having four main sections and a glue flap being of same length, alternate ones of main sections being scored to form hexagonal panels.

Receptacle Closure, H. W. Sanford, Knoxville, Tenn. U. S. 2,465,662, Mar. 29. In a container for fluids under pressure, container having a pouring neck with discharge thereon, a cap fitting over discharge end of neck with means on cap and neck for adjustably interlocking the cap on neck and permitting leakage of fluid pressure between cap and neck when the cap is on.

Ink Package Having an Adjustable Sealer, F. A. Sanders (to Frederick H. Levey Co., Inc., New York, N. Y.). U. S. 2,465,755, Mar. 29. A package comprising a container, a cover for container, a body of ink in container, a sealer extending transversely of container between the end of body of ink and resting on upper surface of body of ink to seal it from exposure to air.

Push-On Mechanism for Sealing Screw-Cap Containers under Vacuum, J. Bauman (to Hazel-Atlas Glass Co., Wheeling, W. Va.). U. S. 2,465,706, Mar. 29. Apparatus for vacuum sealing containers with top-seal screw caps engaging threads on the containers, including means for vacuumizing the containers, a vertically reciprocable sealing pad associated with vacuumizing means and sealing pad shaped to engage tops of screw caps.

Carboy Seal, S. R. McQuain, South Charleston, W. Va. U. S. 2,465,811, Mar. 29. A carboy seal thickened to end, forming a shoulder and having stopper comprising a vapor cloth adapted to be extended over stopper and neck portion, having a split band adapted to be fitted about neck portion below shoulder.

Package, J. H. Bonini (to Marathon Corp., Menasha, Wis.). U. S. 2,465,841, Mar. 29. A container of a relatively rigid, foldable, rectangular blank, scored bottom having slot therein and having locking means formed therein for engagement with slot and having a flexible lining sheet covering all walls.

End Closure for Paperboard Containers, L. C. Brooks, Milwaukee, Wis. (one-third to I. M. Jones, Milwaukee, Wis.). U. S. 2,465,842, Mar. 29. A full-opening end-closure construction for the mouth of a multiple-sided container having rigid side walls, having an insert to fit snugly into mouth of container, with thick flexible sealing sheet adhered to underside of insert and projecting beyond edges of insert with pressure-sensitive adhesive on underside so marginal portions are removably adhered to ledge and wall surfaces.

Combined Package and Magazine for Holding Blades and/or Other Thin Articles, C. P. Hornung, Hempstead, N. Y. U. S. 2,465,876, Mar. 29. A package comprising thin elements; a pair of superposed flexible strips, means connecting said strips together, means comprising tacky material, transverse fold lines at spaced intervals which provide respective zones therebetween and folded in accordion-pleated fashion whereby zones are arranged in layers.

Sealed Reclosable Carton-End Structure, M. I. Williamson (to National Folding Box Co., Inc., a corporation of Connecticut). U. S. 2,465,949, Mar. 29. An end closure for a carton having a front and back wall and double thickness side walls, each side wall consisting of an inner and an outer side-wall panel, the closure comprising in combination, a pair of first side flaps

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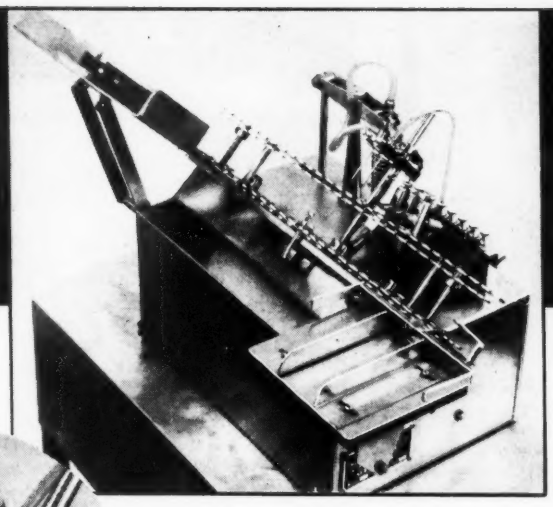

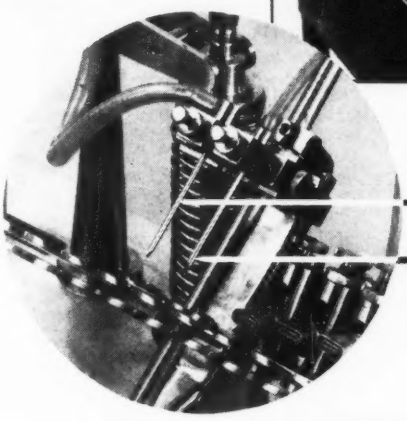

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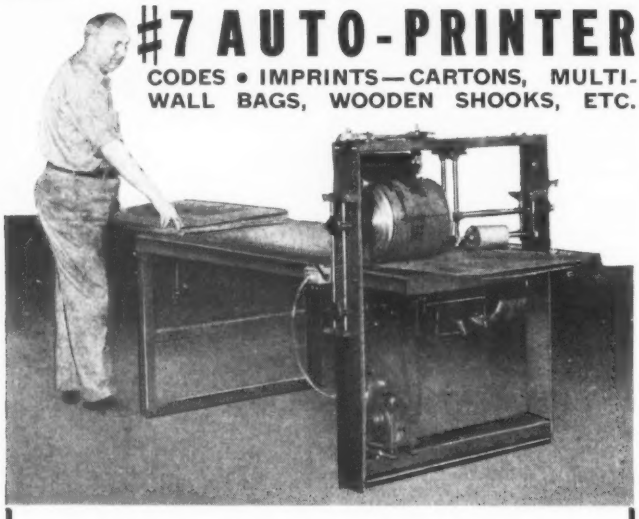

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U.S. Patents Digest
(Continued)

hingedly connected along fold lines to the inner side-wall panels; a front flap severably connected to the front wall along a cut score line and folded over the infolded first side flaps; a top panel hingedly connected along a fold line to the back wall, top flaps being adhesively secured to top panel.

Collapsible Metal Crate, A. R. Ferguson, Seattle, Wash. U. S. 2,446,220, April 5. A collapsible metal crate comprising a substantially flat crate floor; integral marginal flanges on crate floor, flanges comprising upwardly projecting portions that extend above plane of floor, rolled tubular portions at upper extremities of flanges and reinforcing member in rolled tubular portion extending around crate.

Connecting Means for Pivoted Rotary Closures, A. P. Algier (to W. D. Foster, Glendale, Calif.). U. S. 2,466,295, April 5. In a compact, the combination of a base member having an opening therein, a lid member covering the opening in base member, primary cam means associated with said base member, secondary cam means associated with lid member, primary and secondary cam means locking lid member from base member upon limited rotation of lid member.

Container Support, A. C. Waterman, Shreveport, La. U. S. 2,466,288, April 5. A device for supporting and securing flanged containers including a flange supporting an engaging bar, a sleeve to which the bar is secured, a container cover hingedly connected to sleeve, so positioned to grip flanged end of container when cover on same is closed.

Container-Forming Machine, J. G. Vergobbi (to Pneumatic Scale Corp., Ltd., Quincy, Mass.). U. S. 2,466,341, April 5. In a container-forming machine, a forming block about which a blank of lining material may be wrapped to form a lining, bag means for folding the longitudinal marginal edges of the thus-wrapped blank into face-to-face relation with the marginal edges projecting from the block and means for applying pressure to edges to form an outwardly projecting seam.

Display Box, L. D. Young (to Douglas Young, Inc., a corporation of Rhode Island). U. S. 2,466,346, April 5. In a box, a cover section and a similar body section telescopingly fitting within the cover section when in closed position and, when open, to incline the body section and cover on a supporting surface.

Collapsible Cylindrical Container, R. E. Gilmore, Portland, Ore. U. S. 2,466,542, April 5. A container consisting of a plurality of accurate sections uniting to form a complete cylinder, each section having an accurate channel secured to the outer side thereof at each end and between the ends with their open sides outermost and band clamps occupying outer channels, clamping sections around heads.

Strip-Serving Machine, T. H. Krueger (to Better Packages, Inc., a corporation of New York). U. S. 2,466,715, April 12. A dispenser for tacky tape having a feed element including a series of spaced tape-adhering surfaces for feeding of tape by rotation of said element, cutter associated with each of said surfaces, which include movably mounted blades and means to operate blades independent of the relative position of said element.

Heat-Sealing Device, T. E. Piazze (to Shellmar Products Corp., Mt. Vernon, Ohio). U. S. 2,466,735, April 12. A heat-sealing device for sealing together heat-sealable materials comprising an anvil for supporting superposed sheets of materials in position for sealing, an expansible tubular member overlying anvil and spaced therefrom a distance to receive materials to be sealed, a circuitous conduit connecting the ends of tubular member, whereby a heated fluid can be circulated under pressure therethrough to heat and expand tubular member against materials to seal same together.

Crate Unloader, P. E. Fischer (to Hartford-Empire Co., Hartford, Conn.). U. S. 2,466,693, April 12. A conveyor for transporting horizontally a crate containing layers of upright containers to be unloaded therefrom, said conveyor supporting the crate by its bail by means of a chain and hook.

Paper Bag Tube-Severing Machine, G. W. Poppe (to Equitable Paper Bag Co., Inc., Long Island City, N. Y.). U. S. 2,466,823, April 12. A machine including a feeder for continuously pushing a traveling web of flexible material from it, a speed-up device spaced from feeder for gripping material fed therefrom and intermittently forcing gripped portion thereof to a higher traveling speed than is imparted by feeder and a slow-down device between feeder and speed-up device for gripping material and intermittently forcing the gripped portion thereof to a slower travel-

Self-service stores deem price space essential on your lithograph closure design.

How to win friends and influence sales...

Latest figures show that 86% of food sales are made in self-service stores. The favor of these pace setters and volume producers is certainly worth courting for increased sales of your product.

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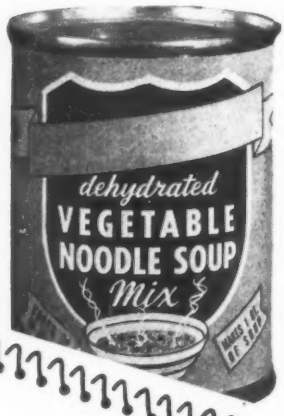

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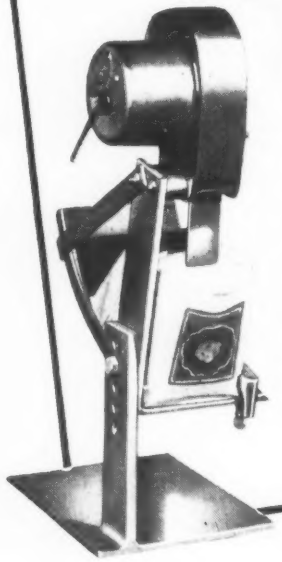

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U.S. Patents Digest
(Continued)

ling speed than is imparted by feeder, whereby material is intermittently tensioned to sever a length from the remainder.

Face-Powder Container, M. J. Brandt, New York, N. Y. U. S. 2,466,875, April 12. In a face-powder container for a box of powder and a puff, the combination of a shell portion with walls sloping towards its center and terminating in a circular wall forming a cell with the bottom of the shell, the diameter of the cell being smaller than the diameter of a standard box containing face powder, and having disposed spaced ribs on inner surface of shell extending radially from circular wall to support the box.

Receptacle and Closure Therefor, H. J. Moon (to National Enameling & Stamping Co., Milwaukee, Wis.). U. S. 2,466,819, April 12. A device for removably securing a head on a receptacle, comprising a contractible channeled ring for pressing the head and receptacle together when the ring is contracted and means for contracting ring in a plurality of angular positions with respect to the head.

Filter-Cartridge Package, C. J. Rohland (to Fram Corp., a corporation of Rhode Island). U. S. 2,466,999, April 12. A filter-cartridge packaging comprising a tubular sleeve and a filter cartridge of the sock type which is housed within said sleeve in frictional engagement with the inner surface and which may be manually forced axially out of the sleeve into a filter casing, said cartridge comprising a containing skin, with a soft expandible filling with skin, the cartridge being held against diametrical expansion by said sleeve.

Container, H. E. Smith (to Celanese Corp. of America, a corporation of Delaware). U. S. 2,466,666, April 12. A plastic container comprising a cylindrical body having an internally beaded open end and an inwardly tapered portion adjacent to beaded end and a cover for cylindrical body, said cover having a tapered fit to form a tight or vacuum fit.

Locking Cap for Receptacles, A. W. Konchan, Berwyn, Ill. U. S. 2,467,087, April 12. A locking closure construction comprising a cupped cover member, a body member in the form of a flanged cup permanently connected to cover in relative rotatable relation to cover, locking means including a barrel carried by and rotatable with the cover, locking means including a slide bar movable transversely of the axis of barrel into and out of position for connecting cover member and body member in unitary rotatable relation.

Receptacle Closure Means, A. W. Konchan, Berwyn, Ill. U. S. 2,467,088, April 12. Closure means for a receptacle, including a receptacle neck having inturned portions forming circumferentially spaced flanges having inclined lower edges, a cap member for application to neck having a part movable axially of cap and having lugs engageable with the inclined edges of flanges, a tensioned leaf spring mounted in cap and connected by pins to said movable part.

Method of Making Fibre Containers with Metallic Closures, R. Beattie (to Tide Water Associated Oil Co., Bayonne, N. J.). U. S. 2,467,182, April 12. In the application to a fibre container body of a metallic end closure having an annular channel defined by side walls coated with a sealing compound, the method which comprises, in order, steps of (a) inserting the edge of the fibre container body into the channel, (b) forming a circumferential corrugation in the outer closure wall defining channel, while simultaneously forming an oppositely disposed corrugation in the inner closure wall defining channel, corrugations being formed sufficiently deep to deform the fibre container, to trap sealing compound between the channel and the container.

Taping Machine, A. F. Shields (to The S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y.). U. S. 2,467,275, April 12. A taping machine for applying a tape to the seams of folded blanks passed therethrough, said machine comprising a tape supply, tape-supplying means for drawing tape from the tape supply and for supplying an end of the tape to the leading end of a seam in the folded blank and means for moving a blank into registry with tape-supplying means so that the leading end of the seam thereof is in registry with the end of the tape at the initiation of the operation of tape-supplying means.

Apparatus for Wrapping Shrubs, E. H. Young and A. W. Nowacki (to Comstock & Westcott, Inc., Cambridge, Mass.). U. S. 2,467,286, April 12. Apparatus for spirally wrapping shrubs comprising a wrapping mechanism with a wrapping head for spirally winding a continuous strip of wrapping material about a shrub from the butt progressively to the tip thereof.

Correct from Any Angle

THREE FULLY EQUIPPED PLANTS TO SERVE YOU

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STANDARD SIZES DELIVERED FROM STOCK — FAST SERVICE ON CUSTOM PACKAGING AND SEALS

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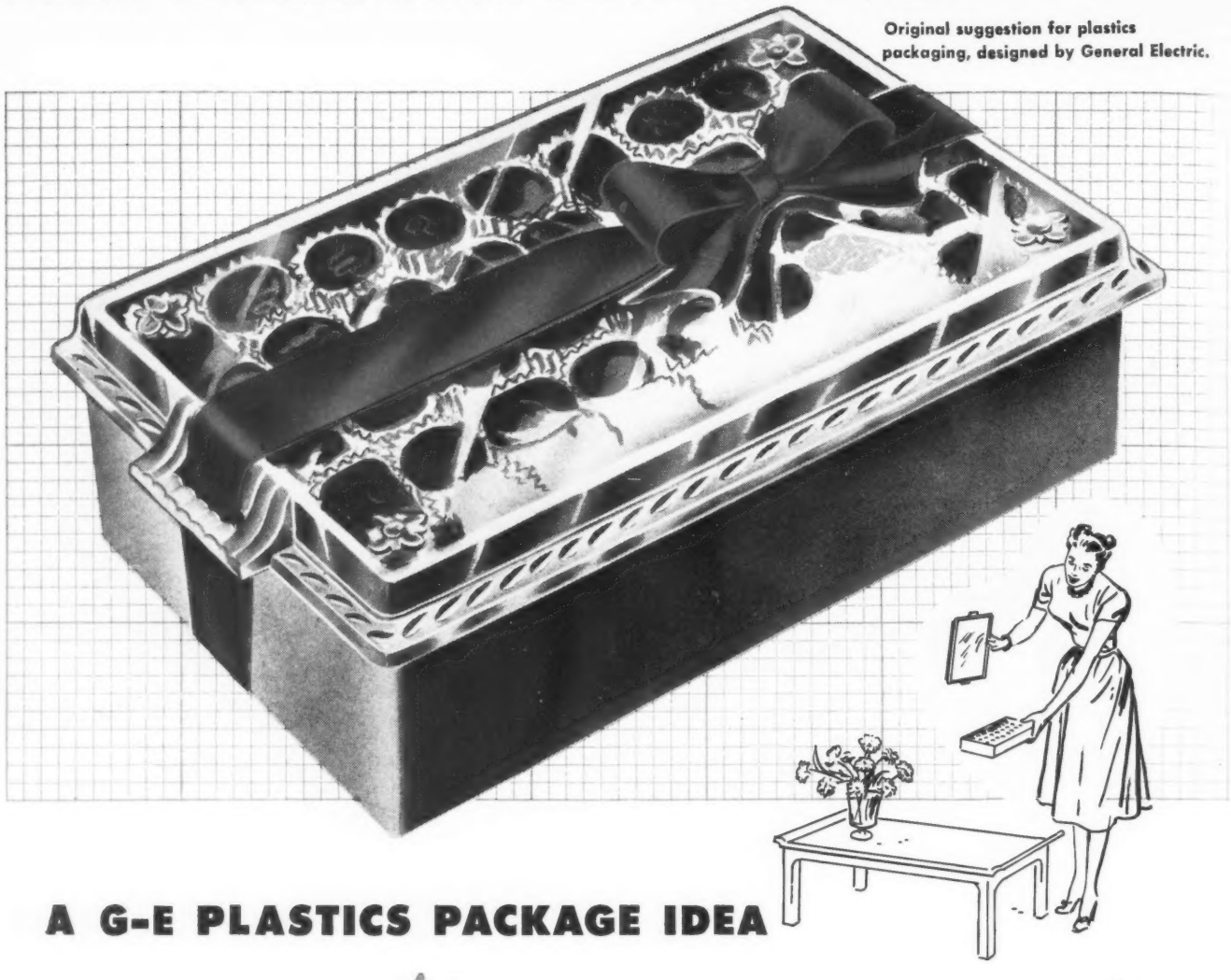

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The transparent plastics tray-top of this chocolate box will transform candy or fancy food boxes into useful gift items.

This decorative yet functional top can be used on ordinary candy boxes, giving them that *extra* appeal that turns prospects into customers. Turn the top over, and it's a lovely tray for serving the contents of the package. The raised flowers in the corners provide feet for the tray and allow the boxes to be stacked without crushing the ribbon bows.

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EVERYTHING IN PLASTICS

Charles S. Welch Award

The House of Gourielli received the Charles S. Welch Packaging Award for its "Five O'Clock" and Here's How" fragrance series packaged in miniature cocktail-shaker containers.

The presentation of the award was made at the annual convention of the Toilet Goods Assn. by Pierre Harang of Houbigant, chairman of the award committee, to Roy Titus, general manager of Gourielli, who accepted in behalf of the firm in the absence of Princess Gourielli, who conceived the line, but was in Europe at the time of the presentation.

Honorable mention went to the Mem Co. for its Mem of Vienna Guest Pack.

Singled out for their active participation in the creation of the Gourielli line were: Ladislas Medgyes, art director, for design, including the development of the unique and efficient closures, and Catherine A. Burke, purchasing agent, for the very complex job of organizing the mechanics of execution.

The line includes five sizes of glass containers in the shape of cocktail shakers, ranging from 1 dram to 4 oz. The two small sizes have one-piece screw caps which fit flush to the containers, but the larger ones have closures of two-piece construction, comprised of a standard screw cap and an outer shell in the shape of a cocktail-shaker top. It was these outer shells which presented the most difficult packaging problems, since they had to fit securely and meet neatly the contour of the bottles. The problem was finally solved by making the shells of a special brass with more than ordinary spring and equipping them with three prongs which snap over the specially designed glass container.

In addition to the distinctiveness of the containers, the prize-winning Gourielli packages were selected for the individuality of the merchandising conception, as well as the simplicity and restraint of the box and carton designs.

CREDITS: **Gourielli**—*Set-up boxes, Karl Voss Corp., Hoboken, N. J. Glass containers and printing on glass, T. C. Wheaton Co., New York, and Carr-Lowrey Glass Co., Baltimore, Md. Metal closures and lipstick cases, Majestic Metal Specialties, Inc., Moosup, Conn. Metal closure for 1-dram bottle, Brass Goods Mfg. Co., Deep River, Conn. Printing of foil wrap on large box, Arkay Printing Co., New York. Folding cartons, Lord Baltimore Press, Baltimore, Md., and E. J. Trum, Inc., Brooklyn. Cover paper (Crystallon), Riegel Paper Corp., New York. Laminated foil cover paper, C. R. Whiting Co., Inc., Hackensack, N. J.*

ADDENDUM—The new Gumpert's cake mix packages illustrated on pp. 112–113 of the May issue were designed by Egmont Arens, New York.

Package and product marking are important factors in today's market. Marking *can* be attractive and it *can* be done economically. Marking equipment *can* be versatile.

Markem's 38 years of experience developing product and package marking equipment and Markem's fast-drying, permanent inks have helped solve hundreds of marking problems in the shoe, cosmetic, drug, electrical and industrial fields. With Markem equipment, marking is done in your own plant, as you want it. No large inventories of boxes or labels.

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Cady Tissue Scale (left) registers 0 to 20 lbs., shows weight in lbs. for 480 or 500 sheets. Doubling weight furnished for registering 20 to 40 lbs.

Cady Paper Scale (right) registers ¼ to 120 lbs., shows weight in lbs. for 480 or 500 sheets; in Kilograms for 500 sheets only. Also made to show weight in lbs. for 1000 sheets.

Cady Boxboard Scale (not illustrated) registers number of sheets per 50 lb. bundle; has clip for sample instead of basket as above. All Cady scale. are precisely calibrated, easily balanced. Double verniers assure error free reading.

Write for complete information and prices of Cady Instruments for packaging materials: Scales, Burst Testers, Dial Micrometers. Stock or special models available.

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Serving Converters and Package Printers all over the world

Coty L'Origan

(*Continued from page 107*) equally exacting in its demands for perfect packaging.

Periodically, sample packages from Coty assembling laboratories all over the world are sent to these two headquarters for examination and inspection. If the packaging does not measure up to standards, the local laboratories are notified and the matter is not dropped until the samples sent through are the best that can be obtained.

During the last few years, mounting costs of labor and packaging materials have made these demands for perfection difficult to maintain in view of the fixed price for the face powder. But Coty insistently refuses to cut corners on printing or box finish. Quality powder boxes still require a considerable amount of hand work in spite of mechanical improvements in box manufacture, which add to packaging costs, but Coty stakes its reputation on quality and pays the price.

In France the powder boxes are made in a modern Coty plant, a familiar landmark near the Longchamps race track.

There is no difference in the surface design appearance between the American and the French L'Origan boxes. There is a difference in construction. The French boxes have drawn covers, slightly domed, and are presented without the acetate jacket, which is not favored in many markets outside the United States. While the transparent jacket adds brilliance and a protective outer surface for the powder boxes, it slightly conceals the beautiful embossing of the cover paper, a feature which the Europeans seem to like.

Actually, Coty executives often have asked themselves whether the world-wide fame and acceptance of the powder-puff box might not also be a handicap to other products. The world knows the box so well it has taken a "heap of doing" to acquaint women with package design for other Coty products and to promote packages for the diversity of products required in modern cosmetic merchandising.

But there is no one from chairman of the board, Grover A. Whalen, to the most far-flung dealer who will not agree that the powder-puff box has been a pacemaker for Coty merchandising and a decisive factor in helping to roll up Coty sales, which last year reached the highest volume in history and were six times greater than when Coty established its stabilization policy in 1933.

To put it in the words of Philip Cortney, president of both Coty, Inc., and Coty International: "As you know, we have many kinds of packages and presentations in Coty. Personally I have never wavered from the opinion that the greatest masterpiece created in the field of packaging of face powder is the powder-puff box which enshrines our great perfume, L'Origan."

CREDITS: *Cover paper, C. H. Forsman Co., New York. Powder boxes, W. C. Ritchie & Co., Chicago. Acetate jackets, Dow Chemical Co.'s Ethylcel and Monsanto Chemical Co.'s Vuepak.*

Future of plastic films

(*Continued from page 148*) characteristics is cellulose acetate.

While very little work has been done to date in utilizing ethyl cellulose film for this purpose, it should be pointed out that ethyl cellulose has about five times the rate of cellulose acetate in carbon dioxide permeability and about the same for oxygen permeability. At this time, ethyl cellulose has only about 65% water-vapor protection and it is a rule of thumb that a protective film for food packaging should have at least 85% water-vapor protection. It is not inconceivable that the chemists will work toward the formulating of ethyl cellulose to increase water-vapor protection without decreasing the gas permeability.

The large field of protective film packaging may be broken into three categories for the sake of discussion: (1) fresh produce and meat pre-packaging at the source, (2) the same general field at the wholesale and retail level and (3) the use of food packaging materials in industry, such as for oleomargarine, cereals, etc.

Produce potentialities

Based on the consumption of fruit and vegetables and the generally accepted method in which they are now packed, it is thought that produce alone in Category I would have a potential market of around 500,000,000 lbs. of film per year if all of these products were packaged at the source and it should be remembered that the motive for pre-packaging is much greater than just merchandising. The function of pre-packaging is to eliminate waste and provide a longer life to the packaged product than otherwise would be obtained by the present methods.

It is interesting to note that the loss on non-packaged tomatoes and citrus fruits is approximately 30% of their 1944 value of $521,000,000. The loss of leafy green and yellow vegetables from the farm to the consumer ranges around 40% and all other vegetables around 29%.

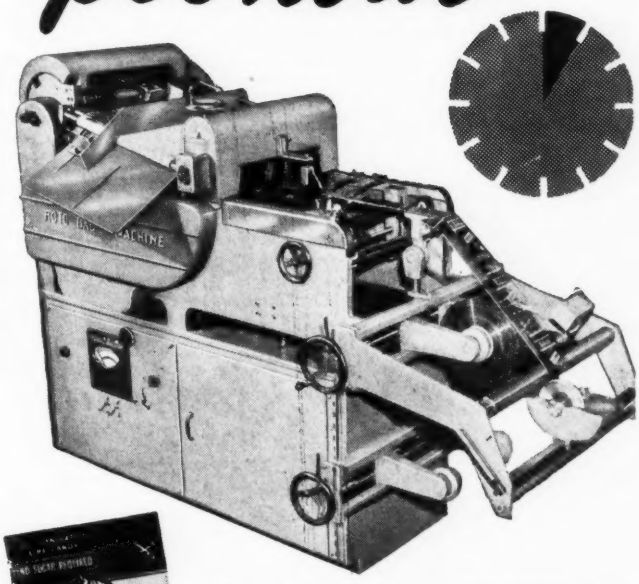
It is thought that during the next few years there will be quite an additional market for plastic film in the general wrapping and bag field (18,000,000 lbs. per year), produce wrapping at the wholesale level (about 10,000,000 lbs. per year), pre-cut meat (10,000,000 lbs. per year) and machine-wrapped fruit (5,000,000 lbs. per year). These markets should develop within the next three or four years and, if properly developed with the proper film for each specification, this should be a great market of the future.

Need for research

We believe there should be a wholehearted sponsorship by the raw-material suppliers to the plastic film industry of a three- to five-year program to answer the many questions now arising in the pre-packaging field, such as the program now set up at Rutgers.

Other fields of packaging for newer films will include those people who desire a tougher film than they are

7200 bags (DOUBLE-SEALED) per hour



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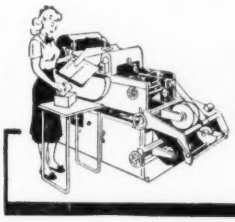

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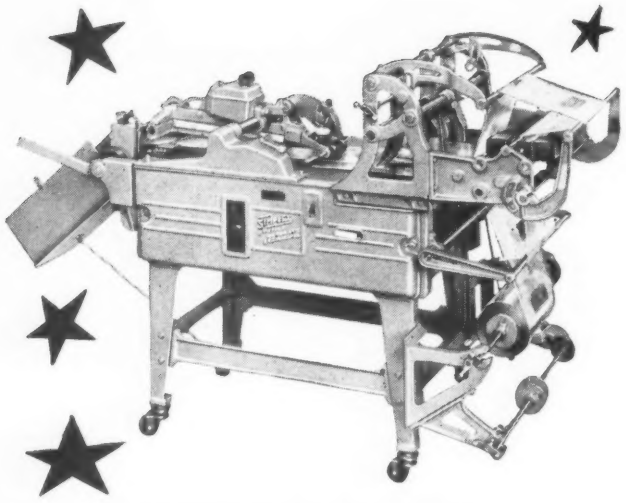

CONTROL BOTH—

Product and Container

In your own plant you control every process in the manufacture of your product to the end that you get exactly what you want—but what about the package in which you sell your product? Does it always measure up to your expectations? Does it display your product to best advantage? It is mighty important that the ultimate consumer see your product in its best dress.

With a SIMPLEX Bag-making Machine in your own plant, you exercise absolute control over the quality of the bags, you depend upon no one for delivery—you make up as many bags as you wish from plain or printed roll stock—your regularly employed help operates the SIMPLEX.

A wide range of attachments is available, such as: Electric eye control; heat seal labeller; bottom crimper; tube maker; brand name imprinting and dating attachments. We will gladly make recommendations if you will tell us about your packaging problems.

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now using, or one with more functional value; and the time has arrived when more stress can be laid on the functional value of the film along with its merchandising value. We have seen many recent innovations, such as the use of polyethylene for frozen food and poultry, and its use by automotive equipment suppliers. Polyethylene tube has even been used on a store level to package six bars of toilet soap, because it was the lowest-cost package that would not break in transit.

It should be noted in conclusion that the newer films will not necessarily replace the older films and their uses, but will broaden the use of films in the various markets in which they fit. Likewise, the development of new equipment will broaden the use of the newer films into markets in which the present films cannot perform properly.

Exposition attendance survey

Research techniques were put to use recently, perhaps for the first time, to gauge audience quality and interest at industrial expositions by Clapp & Poliak, Inc., exposition management firm, for the American Society of Engineers. In the study, conducted by the Elmer Roper organization, persons attending last year's Materials Handling Exposition in Philadelphia were asked what they learned from attending that show, why they went, how long they stayed, how they learned about the show and what they thought of the technical conference sessions held during the show.

The study covered 36 states and Canada. While the survey was made on just one exposition, the conclusions and facts are enlightening. It would seem reasonably accurate to say that the over-all picture for other expositions would follow more or less the same pattern.

The survey showed that two-thirds of those who attended this show were a "new audience"—they had not attended the previous show. Of the total audience, 95% stated that they had come to see "new developments," while 28.5% came to get an answer to a specific question and 18.1% to attend one or more of the technical sessions. While only 54% said they went to the show with the idea of looking at specific equipment, 86% of all the visitors said they saw not only equipment of value to their companies, but equipment they had not known about before. Seventy-four per cent said that they planned to buy equipment as a direct result of the show. In evaluating the show, 22.9% stated it was "very valuable," 74.3% found it "valuable" and 2.2% "pretty much of a waste of time." Time spent at the exposition varied with 19.6% spending half a day, 41.4% a full day, 16.1% two days and the remainder spending a longer time. Two-thirds of those attending spent all of their time at the exhibits, while 11.1% attended one of the technical sessions.

The survey conducted by Mr. Roper was done entirely by mail and sent to 10,164 visitors, not including exhibitors or their representatives. The tabulations were based on a total of 2,842 replies.

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A Charbert package of beauty, using a famous stock bottle of Braun's— the Oval Doric.
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"Where can I purchase a . . . . ?"

"We need a tube which will . . . . ."

". . . and how can we make it stick?"

"What will keep my product moist when . . . .?"

"Our problem is to reduce caking of . . . . . ."

"Who can redesign my package?"

Each month, the Readers' Service Department of MODERN PACKAGING answers scores of questions for our readers. Questions range from simple requests for information about the manufacturer of a can, machine or box to requests which demand detailed, technical answers.

With their extensive files, reference library and wide knowledge of packaging materials, machinery and procedures, the members of the Readers' Service Department can usually supply the information you request. In addition, the technical and editorial staffs of MODERN PACKAGING are at their disposal for attending to questions which are particular "sticklers."

If you have any questions, feel free to forward them. There is no charge or obligation for this service. Address—Readers' Service Department, MODERN PACKAGING. A complete reply to your inquiry will be forthcoming.

MODERN PACKAGING

A Breskin Publication

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Ideal for plain and moisture proof cellophane. Also excellent for glassine, foil, paper.

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Will not attack rubber . . . mild odor.

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GOTHAM INK & COLOR CO.

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GROOM YOUR GOODS *with Ohio*
FABRIC BAGS

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Let us design a fitting fabric bag for your product. Available in any size or shape. Simply send sample and we'll return it in a handsome Ohio Fabric Bag. No obligation.

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Trademarked papers

(*Continued from page 96*) with diapers, goblets on papers for wrapping glassware, etc. Many unusual papers carry beautifully lettered monograms or signatures arranged either symetrically or asymetrically. No matter what the design, it must be kept simple if it is to be suitable and flexible for reproduction on a variety of papers in a family group.

Most exciting, of course, are the luxury papers created for the country's leading stores. Designs for these follow no trends. Individuality is the rule to dramatize the store each design represents. Current motifs range all the way from the Victorian violets currently used by Bonwit Teller to Spanish Christmas messages and cactus on paper for Goldwaters' in Phoenix, Ariz. Many of these papers are gift wrappings. But today there is a practice of selecting one design theme that can be used the year around and integrated for a store-wide packaging program and sometimes printed in different colors for different departments. Design motifs with local interest showing familiar buildings and street scenes or suggesting local characteristic symbols are popular. Examples are Macy's Herald Square paper and Wanamaker's sketches of New York. In New England, one store uses a motif of pine branches as suggestive of the Maine woods. In Long Beach, Calif., Buffum's uses a charming motif of shells, seaweed, fish and other marine life.

Such design ideas are not only individual, but flexible. They can be adapted to gift wraps, box coverings, regular store wrapping paper, shopping envelopes, wrapping tissues and heavy kraft shipping paper.

Chain and mail order houses are as aware of the promotional impact of private-design papers as the more exclusive stores, but they can't be sold on sophisticated design ideas. They are convinced that their customers want traditional holly, Santa Clauses and Christmas trees on holiday papers and that's what they buy.

Many of the beautiful trademarked papers are those which are embossed or watermarked. Unfortunately, they do not lend themselves to photographic illustration in this article, but they do represent a very important and significant place in the private-design paper field.

Any trademarked paper program may be undertaken on a gradual basis, starting with inside tissues and subsequently carrying through to the over-all box cover or loose wrap. Some converters offer semi-exclusive designs, where the signature may be slugged in and the paper produced in considerably smaller quantities for initial orders. Certain lithographic houses also produce Christmas box wraps which they sell with names imprinted, exclusive one to a city.

Any firm still using blank paper for any wrapping purpose had better look into the possibilities of using that space to make its paper bills one of the most

if

your containers look like any of these:

Any standard beverage bottle or cylindrical glass container 6 ounce to quart size

and

your labels look like these:

(and you desire the benefits of fully automatic operation)

Any combination of BODY NECK and FOIL

then you should investigate the advantages of

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AUTOMATIC *Multiple* LABELERS

These highly accurate and dependable machines operate on the multiple principle which permits high output at slow machine speed. Result . . . good labeling, minimum breakage, steady output, long machine life, minimum operating attention and low maintenance cost.

An Ermold field representative will be glad to study your problem with you to determine whether Ermold labeling methods will save you money. Ask to have him call.

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FOUNDED 1880
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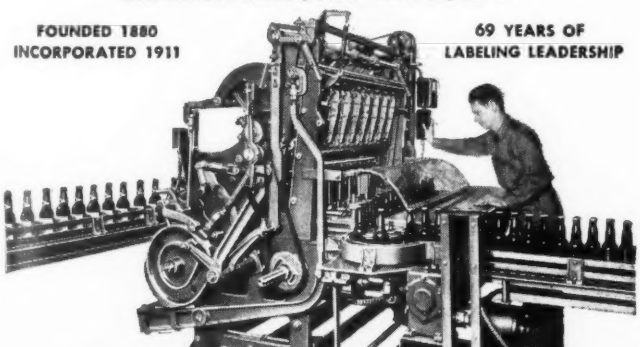
69 YEARS OF LABELING LEADERSHIP



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Look to . . .

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FOR THE OUTSTANDING IN PAPER COATINGS

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An outstanding series of vinyl gloss coatings which give your package that added look of quality has been developed by Watson-Standard.

An example of this series: Vinyl Paper Coating 11-167B, especially made to resemble a flint glazed paper. This coating enables packagers to attain a high quality finish on cheaper grades of paper, making the coating ideal for use in the soap wrapper and cosmetic package field.

If your packaging problem requires a gloss coating, let us help you. Write today. Your inquiry will not obligate you in any way.

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Give us your coating problem. We guarantee you an answer based on your conditions, and not just a standardized formula.

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Apply trade names, trade marks, numbers, insignia, specifications directly to product.

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Put sales messages directly on product for self-selling at point-of-sale. Apply to finest surface.

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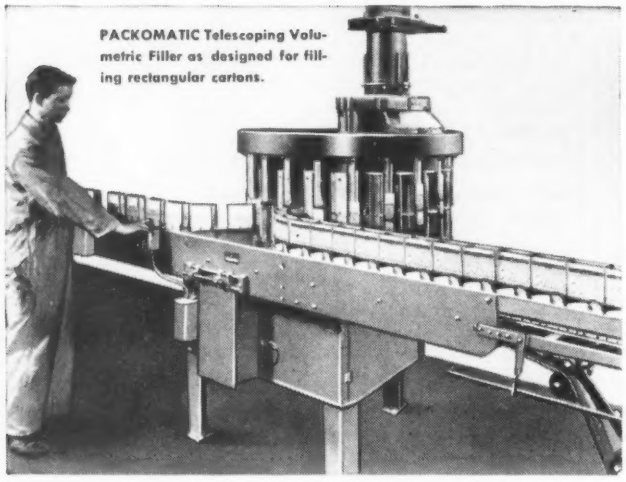

AVOID WASTE and ANNOYING DUST with PACKOMATIC'S TELESCOPING FILLER

Designed and built for various container types—and adjustable-convertible to a wide range of carton sizes—PACKOMATIC's Telescoping Filler is now available for packaging dry products such as: Cleansers, bowl cleaners, soot removers, coffee, coffee concentrates, baking powder, cereals, soap powder, flour, etc., *at high speeds* in bottom-sealed cartons, round, rectangular and square cans, jars, canisters.

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effective and economical items in its sales promotion budget.

Here's what some who have tried it have to say. The comments are quoted from the files of a leading supplier of trademarked papers:

"Our business has been built on distinctive wrappings. It has helped us weather two depressions."

"With the threat of falling unit sales and dollar volume, we figure our wrappings can be made our least expensive and most direct form of advertising."

"Ordinary wrappings cost money; our distinctive wrappings make money."

Meat pre-packaging growing

Both the merchandising and technical aspects of self-service meat packaging drew their share of attention at the 12th annual convention of the Super Market Institute, Inc., held last month at the Stevens Hotel, Chicago. A complete session devoted to the installation

Swift's bacon package, designed for self-service selling.

and merchandising of self-service meats included as speakers Paul J. Cifrino, general manager, Supreme Markets, Inc., Dorchester. Mass.; Bert P. Maher, vice president, Henry J. Eavey, Inc., Richmond, Ind.; Milton Sandell, president, Benner Tea Co., Burlington, Iowa; Paul Goeser, research laboratories, Swift & Co., Chicago; Miss Esther Latzke, director of consumer research, Armour & Co., Chicago, and James Cooke, general manager, Penn Fruit Co., Philadelphia.

According to Miss Latzke, a nation-wide survey just completed by Armour & Co. revealed a total of 878 complete self-service meat markets in this country as of April 1, as compared to about 200 such stores a year ago and 400 last September.

"The survey shows further," said Miss Latzke, "that 100% self-service stores are opening at the rate of approximately 75 per month and at that rate, the number will probably be up around 1,500 by the end of this year."

"Both logical analysis and an increasing volume of

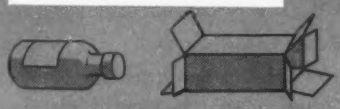
FULLY AUTOMATIC CARTONING

From Product to Display Packer

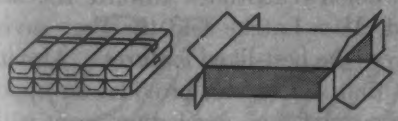
CECO

LOW-COST, ADJUSTABLE, AUTOMATIC PACKAGING MACHINE

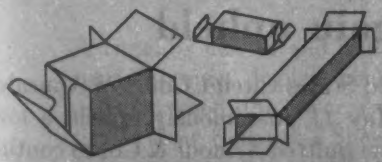
Model 45



CECO Model 45 automatically cartons solid unit items like bottles, film rolls, bearings, and machine parts.



Multiple unit items like cigarettes, chewing gum, spark plugs, tobacco, candy, and drugs are cartoned automatically in display packers.



CECO Model 45 is readily adjustable for various carton sizes and types. It tucks flaps at both ends, or tucks one end and seals the other, or seals both ends.

Fully automatic cartoning, from product to display packer, has now been realized with the new CECO Model 45. This machine performs every operation automatically from start to finish. It feeds and opens cartons, inserts single or multiple products, glue-seals or tucks flaps, and delivers filled cartons to the packing case.

With CECO Model 45 you can enjoy the economy of automatic cartoning on short or long runs of widely different size products. The machine is designed not only to carton any solid, non-sifting unit items such as bottles, film rolls, tubes, bearings, and other machine parts, but also multiples of such items in display packers. CECO Model 45 can also be used to carton in display packers the output of high-speed automatic packaging machines handling large volume items such as cigarettes, tobacco, spark plugs, candy, chewing gum, and drugs.

The simplicity and adjustability of CECO Model 45 offer a marked contrast with complicated, inflexible automatic equipment costing many times more. No other machine at any price offers such versatility, low-cost operation, and economy of upkeep as CECO Model 45.

SEND FOR NEW CECO MODEL 45 BULLETIN

CONTAINER EQUIPMENT CORPORATION

214 Riverside Avenue *Newark 4, N. J.*

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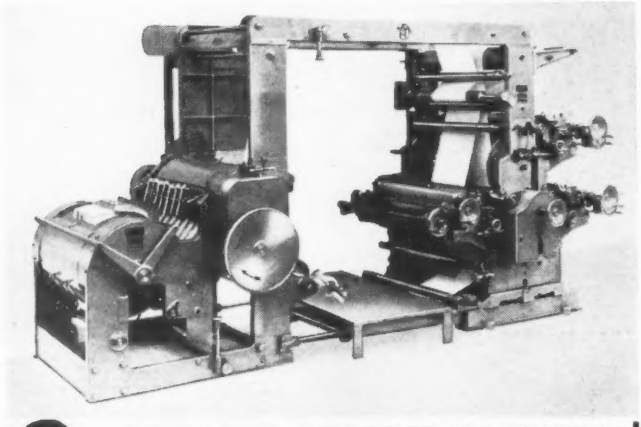


BUSY MEN STOPPED TO GAWK!

Visitors to the Packaging Convention at Atlantic City saw the GF Printer & Sheeter and the Bobst Autoplaten in action! They marveled at their sturdy construction, smooth operation, clean lines.

They asked about web tension, speed, maintenance costs and they learned that the GF Printer & Sheeter

- Prints and cuts at 12000 sheets per hour
- Has sure-fire register
- Allows simple cylinder change
- Has web drive before and after printing to insure even tension
- Also central throwoff to keep ink cylinders spinning when press is stopped.

They learned that the Bobst Autoplaten

- Cuts and creases at guaranteed speed of 4500 sheets per hour
- Has control appliances to stop machine in case of jams, overflows, etc.
- Has hairline register
- Has automatic lubricating device. Just press a button.

In fact there were so many questions and comments, a folder has been prepared so that you may properly evaluate these two outstanding machines and their many exclusive advantages.

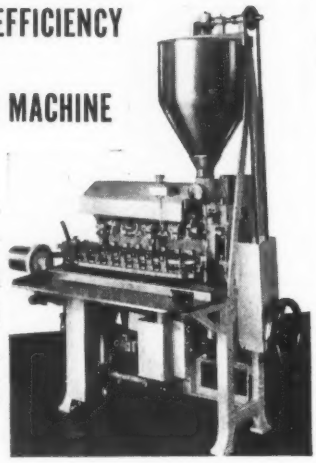
For your copy, write or call . . .

H. H. HEINRICH, INC.

200 VARICK STREET, N. Y. C.

REDUCE DOWN-TIME

INCREASE OPERATING EFFICIENCY with the ARENCO TUBE FILLING MACHINE



Fills, closes, seals and codes up to 55 tubes per minute. Easily cleaned —only stainless steel and Monel used in parts contacting the material filled.

- Automatic tube cleaning before filling. Cleaning and cap tightening in a single station.
- Fat or fishtail filling—single, double or triple fold, without clip. Excellent for artist's colors.
- No tube, no fill.
- Changes quickly from one tube size to another.

Write today for illustrated data sheet.

ARENCO

THE ARENCO MACHINE

COMPANY

INCORPORATED

25 West 43rd Street New York 28, N.Y.

evidence indicate that a decade hence almost all super markets will feature self-service meat," declared Mr. Cifrino. "Eventually, as we all vie to make our stores more convenient, nearly all meat will be sold on a self-service basis and the industry will sell about as much as it would have anyway."

At a general session of the convention, William Applebaum, assistant general manager, Stop & Shop, Inc., Boston, gave the first official report on pre-packaged meat activity by SMI members. A majority (56%) of SMI member companies already have had some experience with self-service meat, while 22% have one or more complete self-service meat departments and 25% partial self-service meat operations. Of the total SMI super markets, 13% have complete self-service meat departments and 15% have partial self-service. Sixty-nine per cent of all the *complete* self-service meat installations were made in 1947 and 1948.

Mr. Applebaum stated that 46% of SMI member companies are now planning to install either complete or partial self-service meat departments, or both. Of the companies planning self-service meat installations during 1949, 36% had no previous experience with this type of operation. "Companies which have had previous complete self-service experience are seemingly generally sold on it," stated the speaker. "Sixty-three per cent are planning additional installation."

Mr. Applebaum also said that pre-packaging of some perishables is done by 84% of the SMI companies, while 14% do some central packaging. Cheese is pre-packed in two out of three member markets; fresh fruit and vegetables in a little better than one out of five, and fresh meats in 17% of the supermarts.

Quick service at the meat counter and the elimination of store bottlenecks were cited by several speakers as the greatest virtues of meat pre-packaging and self service.

Reporting on women's attitudes toward the self-service meat trend, Miss Latzke said the time saving and convenience were the best-liked features. Also important is the fact that self service provides an opportunity to choose what and how much they want without having to ask for it.

Armour again upheld

The Third United States Circuit Court of Appeals in Philadelphia on May 17 unanimously upheld a lower court ruling which permitted Armour & Co. to continue using their red-and-white label. It was Armour's second victory in a court battle started by Campbell Soup Co. and Carnation Co. to prohibit Armour from using the colors, which the plaintiffs said infringed on their own labels using the same general colors. In his opinion, Judge Herbert F. Goodrich, speaking for the higher court, said: "If Campbell and Carnation may monopolize red in all its shades, the next manufacturer may monopolize orange and the next yellow. Obviously, the list of colors will soon run out."

Clearly...

A CASE TO LOOK INTO

A THING OF BEAUTY and lasting satisfaction—this sparkling new display container. The base is polished wood; the cover, drawn from tough, optically clear Kodapak I Sheet, invites inspection, helps increase the salability of the merchandise within. What's more, thanks to its unexcelled chemical stability, Kodapak Sheet retains its sparkling transparency indefinitely.

Kodapak Sheet comes in two basic forms: Kodapak I Sheet, cellulose acetate, gauges up to 0.020″; Kodapak II Sheet, cellulose acetate butyrate, gauges up to 0.002″. Made, side by side, on the same type of machines, to the same high standards as Kodak photographic film base.

To learn more about Kodapak Sheet, its fabrication and end uses, you are invited to write for further information, consult your nearest representative, or visit Kodapak Demonstration Laboratory in Rochester.

Cellulose Products Division, Eastman Kodak Company, Rochester 4, N. Y. Sales offices in New York, Chicago. District sales representatives in Cleveland, Philadelphia, Providence. Pacific Coast distributor: Wilson & Geo. Meyer & Co., San Francisco, Los Angeles, Portland, Seattle. Canadian distributor: Paper Sales, Limited, Toronto, Montreal.

FOR THE DISPLAY YOU WANT... THE PROTECTION YOU NEED

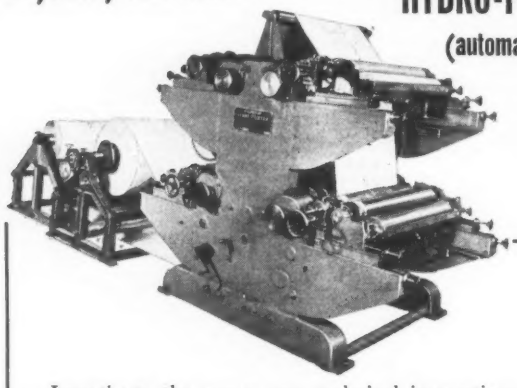
"KODAPAK" IS A TRADE-MARK

Kodapak Sheet

Kodak

Don't be satisfied with anything less than... a → **"WOLVERINE HYDRO-PRINTER"**

(automatic hydraulic Aniline Printing Press)



Investigate the many new technical innovations and improvements:

1. Hydraulic, instant on and off impression control.
2. Free wheeling, constant rotating ink rollers.
3. Instantaneous *running* register control.
4. One single impression drive gear (no back lash).
5. Most rigid solid and compact 5-inch frame construction.
6. A complete *one* push-button controlled press.

Check and compare these, and many other new features with any other Aniline Press on the market and then give your plant, and press operators the finest press to work with.

* Widths from 31″ to 122″ * From two to twelve colors

Excellent for the speedy, highgrade production in printing all kinds of paper, board and indispensable for cellophane, polyethylene saran and any other plastic films and foils.

Wolverine PAPER CONVERTING MACHINERY CORPORATION

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Western Show plans

Western executives concerned with packaging problems—and executives of packaging, packing and shipping concerns serving the Western market—are looking forward to the 2nd Western Packaging Exposition and Conference on Packaging, Packing and Shipping, to be held at San Francisco's Civic Auditorium Aug. 9 to 12.

The success of last year's First Western Packaging Exposition and Conference, which attracted over 6,000 visitors, prompts the packaging industry in that area to look forward to a larger show this year, at which some 125 major firms will exhibit.

G. W. Aljian *H. C. Diehl*

The change from a seller's to a buyer's market, according to George W. Aljian, director of purchasing and packaging, California and Hawaiian Sugar Refining Corp., increases the importance of proper purchasing and efficient organization. "Most important, therefore is proper procurement and selection of packaging materials, interest in new products, new materials and new machinery," Mr. Aljian pointed out. "In my opinion, the ideal way to handle this problem is to see and hear for yourself what the forthcoming Western Packaging Exposition has to offer . . . it is bound to be helpful to Pacific Coast packaging interests—both sellers and buyers."

H. C. Diehl, director and secretary of the Refrigeration Research Foundation, Inc., said that last year's Exposition "was an event of prime importance to Western commerce and industry. . . packaging is a basic, primary factor for foods. . . I believe the 2nd Western Packaging Exposition will help all of us in the food industries to get a better perspective on packaging progress and at the same time serve as a stimulus to act by using the packaging advances which manufacturers have developed and are placing before us."

Peter D. Bowley of Peter D. Bowley & Associates, manufacturers representatives, called attention to the growth in packaging activities on the Coast during the past 10 years. He urged every packaging machine manufacturer and manufacturers of supplies for packaging to be represented with display space at the Western Packaging Exposition. "Everyone interested in any phase of packaging should attend," Mr. Bowley said, pointing out that the 1949 show is expected to be the biggest affair of its kind on the Pacific Coast.

CORRECTION—The vegetable parchment bags used in connection with the package for 7-Minit lemon pie mix, illustrated on p. 167 of the April issue, were fabricated by Kehr Paper Products Co., Philadelphia. The Paterson Parchment Paper Co., which supplied the material, makes no bags.

GO!

"NON-STOP" PRINTING

OXY-DRY means...

- **"Good-Bye" OFFSET WORRIES**
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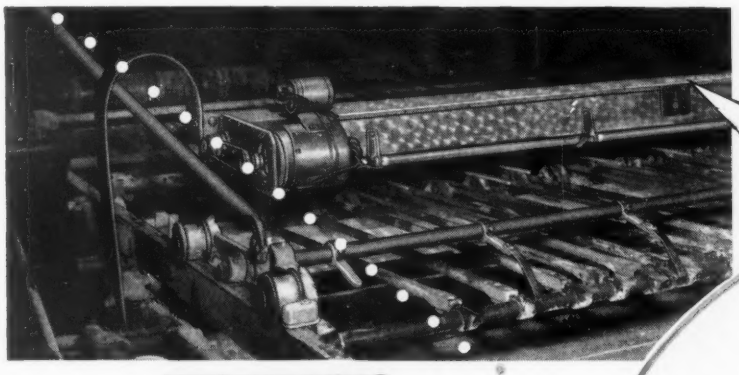

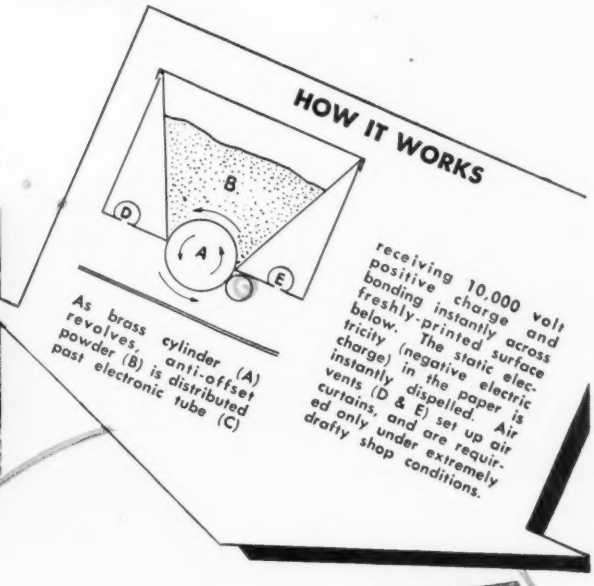
HOW IT WORKS
B
D
A
E
As brass cylinder (A) revolves, anti-offset powder (B) is distributed past electronic tube (C)
receiving 10,000 volt positive charge and bonding instantly across freshly-printed surface below. The static electricity (negative electric charge) in the paper is instantly dispelled. Air vents (D & E) set up air curtains, and are required only under extremely drafty shop conditions.

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Stopped presses make no money. OXY-DRY helps keep presses running—makes you more money because (a) Sheets can be stacked to full capacity of press delivery without trace of offset. (b) Quick drying of ink through ozone action speeds handling—helps keep delivery clear. (c) One powder-filling of unit usually lasts 24 hours running time. No press stoppage for frequent refills.

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UNIFORM OFFSET PREVENTION . . . Powder bonds instantly across printed surface, acting as uniform spacer between sheets.

STATIC ELIMINATION . . . assures easy flow of sheets. No sticking or jamming of paper.

DRYING SPEEDED . . . Non-toxic ozone created by electrical discharge from high-voltage tube speeds oxidation of ink—quickens drying.

FASTER HANDLING . . . Removal of all offset danger enables printer to stack sheets, handle full skid loads, at full press delivery capacity.

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Installs on Every Type of Press . . . Works with Any Kind of Printing Process.

HUNDREDS OF PLANTS, Using Every Kind of Printing Press and Process, Are Now Successfully Equipped with OXY-DRY SPRAYERS.
We will gladly supply you names of printers in your region using OXY-DRY SPRAYERS with the type of printing press or process in which you are interested.

For further information write Dept. MP.

OXY-DRY SPRAYER CORPORATION

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OXY-DRY

. . . allows stacking of sheets to full press delivery capacity without trace of offset.

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Polyethelyne Bags

at LOWEST PRICES YET!

A complete, visual-protective bag that will not cut into your profits . . . Ideal for dry or liquid foods, chemicals, hardware items, powders, meats, poultry and all types of fresh and processed foods . . . and the cost is so low!

EVERETT POLYETHELYNE BAGS are . . .

- Climate proof—protect goods under extremes of heat, sub-zero cold or high humidity.
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Let us help you select the POLYETHELYNE bag best suited for your needs. No obligation, write . . .

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TRANSPARENT CONTAINER CORP.
ORegon 3-4740

PRODUCT POWERFULLY IDENTIFIED
THROUGH USE OF SyrocoWood
MOLDED WOOD PLASTIC

ADVERTISING DISPLAY

TRADEMARK ON CONTAINERS

The Royal Oak trademark has been handsomely projected in an advertising display by SyrocoWood, superbly sculptured to show the crown, oak leaves and product name three-dimensionally. Panel and leaves in bleached oak; crown in gold; text in green. The carved oak leaf applied to the containers is also molded in SyrocoWood.

SyrocoWood offers a complete range of textures, rich finishes in wood, metal and all colors.

ADVERTISING DISPLAY DIVISION, DEPT. Y I
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Packaging Institute meets

More than 150 attended a buffet luncheon of the Packaging Institute at the Ritz-Carlton, Atlantic City, on Wednesday of Packaging Week. President Charles L. Barr announced a new committee set-up under a single General Activities Committee, headed by Robert de S. Couch of General Foods and a steering group. The reorganization was authorized by the board of directors to avoid confusion of duties and overlap of functions, especially between the old Technical Committee and the Standard & Practices Committee. Mr. Couch spoke and explained the new organization chart, which includes new committees on Foods and Glass.

The Packaging Institute for the first time had a booth at the AMA Packaging Exposition, provided gratis by the exposition management, and Executive Director L. V. Burton reported that nearly 1,000 visitors stopped to inquire about Institute membership or literature. Dr. Burton was a speaker at the technical session of the AMA Conference (see p. 133).

Biggest packaging machine

(*Continued from page 129*) on the infeed conveyor, thus keeping all motion of the stack in a straight line. Squeezers and reinforcement-strip inserters will be separate attachments on the new model, which will operate on a 30-second cycle instead of the present 35-second cycle. By adding an extra pressing rail conveyor and a hydraulic drive, the cycle can be cut to 15 seconds, it is expected.

While the present machine thus does not represent the ultimate, it is a very substantial cost-cutter. Time studies showed that wrapping of the Maizewood packages by hand required an average of 12 man-minutes per package, which is a labor cost of approximately 24 cents. The machine has cut this to two man-minutes, or four cents.

CREDITS: *Wrapping machine developed and manufactured by Mast Development Co., Inc., Davenport, Iowa.*

Noiseless packaging of granules

A new noiseless method for packing granular materials which may find acceptance by manufacturers of commercial packaging machinery was reported to The American Society of Mechanical Engineers at its recent meeting in New London, Conn., by William E. Gross of the Army's Chemical Corps Technical Command.

Its advantages are said to be simplicity, uniformity of packing, noiseless operation and inexpensive design. The uniformity of the packing device is so precise that in most cases where bulk density of the material packed is uniform, it is claimed, that control by weighing to insure legal weight is unnecessary.

Mr. Gross said the device has proved to be "entirely

N.
W.
Y.

FOR GREATER SPEED IN CARTON PACKAGING

Now PETERS presents the N.W.Y., these are the model letters for the new PETERS high speed SENIOR CARTON FOLDING AND CLOSING MACHINE.

It is made to be used as a companion machine with the new high speed SENIOR CARTON FORMING AND LINING MACHINE, brought to your attention last month in Modern Packaging.

The N.W.Y. is one of the fastest carton closers available today, with speeds up to 100 per minute depending upon size of carton used.

This machine is completely automatic, no operator is required.

For greater speed in carton packaging, it's the N.W.Y.

If you would like additional information concerning this machine, just write us and enclose samples of the cartons you are now using.

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Quick Frozen Chicken a la King in Volume Production . . . .

Weighing 4 ounces of chicken meat for uniform, profitable Chicken a la King packaging. College Inn Food Products Co., Chicago, Ill.

do it the Exact Weight Way...

Sales & Service from Coast to Coast

Quality chicken a la king in volume production requires skill, careful processing and accurate packaging to be profitable. Yet the College Inn Food Products Company is doing this task successfully and profitably. Big plump chickens, mushrooms, peppers and pimentos go into this fine product. These ingredients are packed by hand in 12 ounce containers and quick frozen. In an operation of this type checkweighing is of great importance. Without accurate weights packages lack uniformity . . . you have packaging shrink, both of which handicap profitable operation before sales even start. Lost ounces soon mount into pounds and tons. EXACT WEIGHT Scales correctly fitted to the operation solve such a problem. Whatever the product checkweighing is your best cost control method in any volume small packaging operation. Write for full details for your business.

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Exact Weight Scales

THE EXACT WEIGHT SCALE COMPANY
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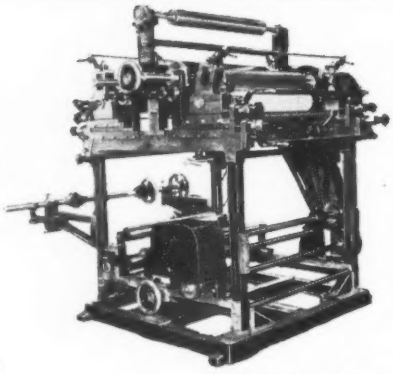
MANHASSET

MULTI-COLOR

ANILINE PRESSES



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This press has most of the essential features of our larger presses:

PRICED AS LOW AS $2,500.00

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- Can be used in combination with converting machines.

We also manufacture bag machines, slitters and rewinders

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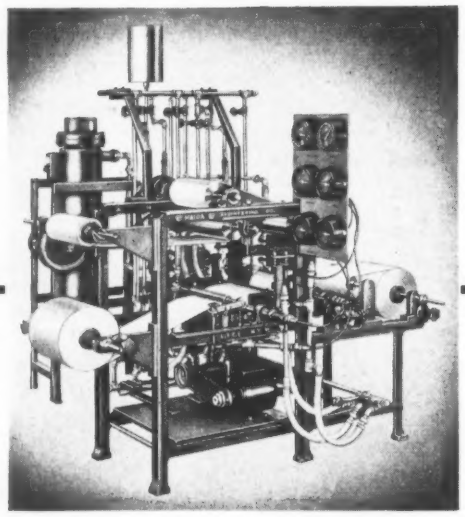

The New Haida Laboratory **Hot Melt Coating and Laminating Machine.** Model LHC-90 accommodates 10″ web. Also production models up to 60″ inclusive. Write for further information.

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Foil Laminating Machines. Complete plants for the manufacture of Carbon Papers, Spirit Carbon Master Forms, Dry Stencils, Typewriter Ribbons, etc.

satisfactory for packing granular sorbent into sorbent containers of gas-mask canisters and for packing various granular materials into packaging containers."

The method employed is basically the gravity-type principle. The gravity-type packing device consists essentially of a frame on which is mounted a drop tube with a hopper mounted at the top. The hopper has a 0.437-in. orifice in the bottom. Three screens spaced 1.5-in. apart are mounted in the upper end of the drop tube, the uppermost one being 1.5 in. below the orifice. A lower chuck for receiving the sorbent container is located below the drop tube on the frame. An upper chuck for receiving the open end of the container is attached to the lower end of the drop tube. This chuck centers the sorbent-container inner tube and shapes the open end of the container. A pre-measured sample is poured into the hopper and allowed to discharge through the distributing screens and through the drop tube into the container. A dispersal head spreads the falling granular material so that it falls evenly over the cross-sectional area of the drop tube. This is said to insure level filling and uniform density. It is also used to secure maximum packing by reducing the head required. Successful operation depends on dropping material into the container at a slow rate of flow through the dispersal head so that the granules fall evenly over the cross-sectional area of the drop tube, according to Mr. Gross. The apparatus is based on the principle that the impact of the falling particles tends to impart a movement to the particles in the surface layer of the material being collected. This movement aids in orienting the granules so that they fit closely together into a minimum space.

SPI emphasizes merchandising

"New Markets for Plastics" were emphasized at the annual conference of The Society of the Plastics Industry held on May 26 and 27 at the Edgewater Beach Hotel, Chicago.

At the opening sessions, the merchandising of plastic products was dramatically demonstrated during the session on "The Challenge to Plastics," presided over by Charles A. Breskin, publisher of *Modern Plastics* and MODERN PACKAGING magazines.

Product design as an important supporting factor for better merchandising was the subject of another of the sessions. Coincident with the trend toward better merchandising in the plastics industry, Elmer French of Firestone Plastics Co. presented for consideration of the members, the SPI Informative Labeling Program. This program provides for an industry-wide informative labeling effort as a means for increasing sales of plastics products by identifying them with facts on their quality, performance characteristics and care as a means of increasing customer satisfaction and acceptance.

George H. Clark, president of SPI, presided over the annual banquet held on the closing day of the meeting.

Keep Pace with...
Market and Production Problems

Quick moving and highly competitive markets of today develop many packaging problems for manufacturers who must have flexibility and economy of operation.

Knowlton's research and engineering staff has simplified the fast production of accurate, uniformly scored paper box blanks with the Knowlton High Speed Double Scorer.

This rugged machine will enable box makers to keep pace with every practical idea of their alert production and packaging experts.

If high labor costs and rising prices of packaging materials are starting worry wrinkles, bring your questions to Knowlton for its expert counseling.

The proudest boast of the diversified Knowlton line of packaging machines is that they will do the job at hand and are ready for any job in the future—better and quicker and cheaper than any other.

A KNOWLTON MACHINE FOR EVERY NEED

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SINGLE & DOUBLE SCORERS
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TUBE RECUTTERS
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FOR SALE: New CECO—latest model folding box package sealing machine, with special automatic self-inking imprinting or code attachment, in use only 2 weeks. Sale, due to change of packaging. Portable on wheels, and adjustable, can accommodate following size cartons: Minimum: length, ½"; width, ½"; depth, 2"; Maximum: length, 3"; width, 2½"; depth, 6". Write Stelz Co., 257 West 17 Street, New York, N. Y.

SLITTING MACHINE Wanted—Capable of making multiple cuts on soft, light gage, unbacked aluminum foil. Please give details and price. Box 835, Modern Packaging.

ALWAYS . . . BUYING . . . containers. Wanted to buy: Your surplus corrugated boxes, paper boxes, mailing boxes, paper bags, cellophane bags, and shipping and packaging items of all descriptions. National Trading Co., 849 Clinton Ave., Newark 8, N. J.

FOR SALE: Approximately 250,000—3 3/8 x 3 1/2" 26 lb. heat seal Glassine flat pouches, in stock less than one year. Bleecker-Foster Inc., Farmington, Minnesota.

EXPERIENCED FOLDING Carton Sample Maker. Excellent opportunity with large national manufacturer located in the East. Replies confidential. Box 822, Modern Packaging.

WANTED: PRINTING press for printing cellophane, single color, web width up to twenty inches—Rotogravure or Aniline. Box 840, Modern Packaging.

PACKAGING EXECUTIVE thorough knowledge all forms of packaging and packaging materials. Production and sales promotion background. Has handled labor relations and contracts and settlements with government bureaus. Responsible for a number of patented packages. Sound business judgment. Capable of developing an entire packaging program or administering package production organization, or district general sales manager. Lately general manager paper converting plant in charge production, sales, labor relations. Reply Box 841, Modern Packaging.

FOR SALE—All or part of 320,000, 2 11/16" x 6 1/16" 55 lb laminated, heat seal, envelope type bag, packed 10,800 per case. FOB price $1.58 per M or best offer. Write for sample. Rogers & Company, 3409 So. Ashland Ave., Chicago 8, Ill.

FOR SALE at reduced prices. 1—Standard Knapp Case Sealer, Type 429, with automatic top and bottom Closer, with type 608 Compression unit. 3—Stokes & Smith Model G1 Auger Powder Fillers. 1—Karl Kiefer Piston Visco Filler. 3—Package Machinery Co. Model F9 Cellophane Wrappers. Many other desirable items in stock. Consolidated Products Company, Inc., 16-20 Park Row, New York 7, N. Y.

FOR SALE: Labeling Attachments Only—for Package Machinery Type FA packaging machines. Specifications and photographs available by writing Box 445, Meadville, Pa.

EXCELLENT OPPORTUNITY for experienced folding carton salesman with progressive carton manufacturer. Box 842, Modern Packaging.

WANTED: Plastic scrap and rejects in any form. Cellulose Acetate, Butyrate, Polystyrene, Vinyl, Polyethylene, etc. We pay top prices for clear, colored and printed scrap in any quantity. Box 781, Modern Packaging.

OPPORTUNITY for experienced folding carton sales executive. Box 843, Modern Packaging.

REDINGTON CELLOPHANER For Sale: Model 91K2, with tear tape attachment, for standard American cigarette pack, 220 volts, 3 phase AC motor, available cheap; also 500 lbs. cellophane for above. Dubee, Inc., 129 West 20 Street, New York 11, N. Y. Algonquin 5-4705.

SPECIAL OFFERINGS—Pneumatic Scale Co. Automatic Cartoning Unit Consisting of Automatic Carton, Feeder, Bottom Sealer, Rotary Filling Machine, Top Sealer and Interconnecting Conveyor. Standard Knapp No. 429, Ferguson Packomatic Carton Sealers. World Straightline Bottle Labeling Machine, 120 per min. (CRCO) Chisholm-Ryder New Way Automatic adjustable Wrap-around Can & Jar Labeler, Adj. to 1 gal. size. Pneumatic and Resina Single Head Rotary Cappers. Stokes & Smith Automatic Duplex Auger Powder Fillers, Cap-press attachment. Filler S. S. 1, 4 and 8 Head Piston Fillers. Ceco Auto Carton Closing Machine. Horix S. S. and Karl Kiefer Rotary Visco Filling Machines. Package Machinery Model FAQ, and FA2 and Hayssen 3-7 Automatic Wrappers. Many other items of interest in stock—fully guaranteed. Tell us your requirements. Union Standard Equipment Company, 318-322 Lafayette Street, New York 12, N. Y.

SALESMAN WANTED. Calling on Packaging Industry to sell Printed Scotch Tapes. Big commissions. Works in as a non-competitive sideline. For information write to Printed Cellophane Tape Co., 328 No. La Brea, Los Angeles 36, California.

WANTED: Night Foreman: Expanding and established Philadelphia area Folding Carton Plant requires qualified aggressive man to supervise cylinder printing, cutting and creasing, and gluing departments. Fine opportunity with plant which will be an Industry Leader within five years. Reply confidentially giving details, age, experience and salary expected. Box 844, Modern Packaging.

SALESMEN for Plastic Closures Wanted! For new factory with 12,000,000 per month capacity. All territories open with competitive prices. Warren Plastics Corporation, Warren, Pennsylvania.

WANTED: 24 stem vacuum filling machine similar to Kiefer filler. Box 845, Modern Packaging.

MANUFACTURERS REPRESENTATIVE to handle complete line of Polyethylene bags. Prefer man who has 1 or 2 allied lines. Should be contacting paper jobbers, paper merchants, food and drug packagers, etc. Good territories open. Write Dura Lee Corp., 1828 Main, Kansas City, Mo. State qualifications and lines you have at the present.

PHARMACEUTICAL PACKAGING man. Manufacturer of antibiotics has opening for man experienced in all phases of pharmaceutical packaging. Technical training and thorough knowledge of all types of filling and packaging equipment required. Background should include experience in label and package design as well as supervision of operating personnel. Must be familiar with F. & D. A. rules and regulations. Location Metropolitan New York. Write complete details. Box 846, Modern Packaging.

CURRENTLY EMPLOYED Sales Mgr. Sales-Eng. No Degree—Practical Experience selling Packaging Machines in $10,000.00 class. Ability to install and service in addition to sell—4 years sales promotion exp. machines and metals. Seeking connection with progressive sound organization. Immediately available. Willing to travel. Part time considered, New Jersey and Met. New York preferred. Contact Box 847, Modern Packaging.

RE-DESIGN YOUR old package. Stimulate sales with an up to date sparkling design with plenty of "eye appeal." Folding and set-up boxes our specialty. Rates as low as $100.00. Thousands of satisfied customers. Write for particulars. Port Studies, 325 W. Huron St., Chicago 10, Illinois.

SALES ENGINEER to handle sales and installation of electronic eye registration controls. We supply a complete unit of both electronic and mechanical parts. Good commission. Good territory open. Leads furnished. Box 848, Modern Packaging.

Some Facts About

PRINTING COSTS

___ PAPER
___ PRESS EQUIPMENT
___ ENGRAVING
___ LABOR
___ PRINTING INKS

IF you bought a new car this year, chances are you paid just about twice as much for it as you would have for a similar model in 1940.

In 1948, the average family spent more money for food *alone* than it did for *all* living expenses—food, shelter, and clothing—in 1939.

And it is no news to printers that, as with other commodities, the cost of the components which go to make up a print job have risen, too. Labor, paper, press equipment, and engraving have gone up from 75 to 110 per cent from 1940 to 1949.* *Yet printing inks have advanced in price less than 35 per cent in a like period!*

Furthermore, research paid for by printing ink manufacturers has resulted in developments and improvements which have contributed to the progress of printing. And, in some instances, these improvements have permitted efficiencies (such as faster press runs) that have helped to create savings for the printer.

The cost of printing inks, relative to other factors of expense involved in printing, is very small. But despite its small cost, ink serves a vital function in printing. On a printed surface, *it's the ink you see.* Printing ink is the medium that transforms a blank page into something attractive and pleasing to the eye, gives it the power to inform, to sell and to record.

No far-sighted printer risks jeopardizing an investment of many dollars tied up in a printing job to save a few pennies by using inks not best suited to his purpose.

National Association of Printing Ink Makers

1440 Broadway, New York City

**Figures from an authentic survey.*

MODERN PACKAGING ADVERTISERS

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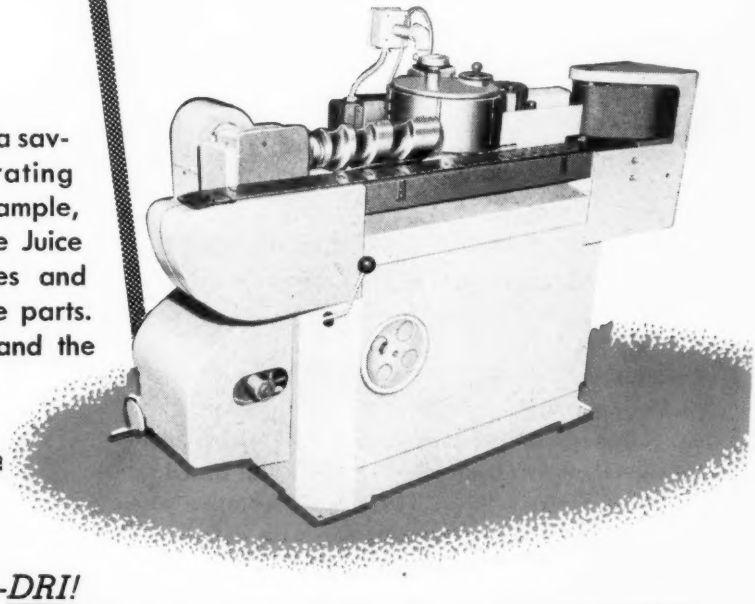

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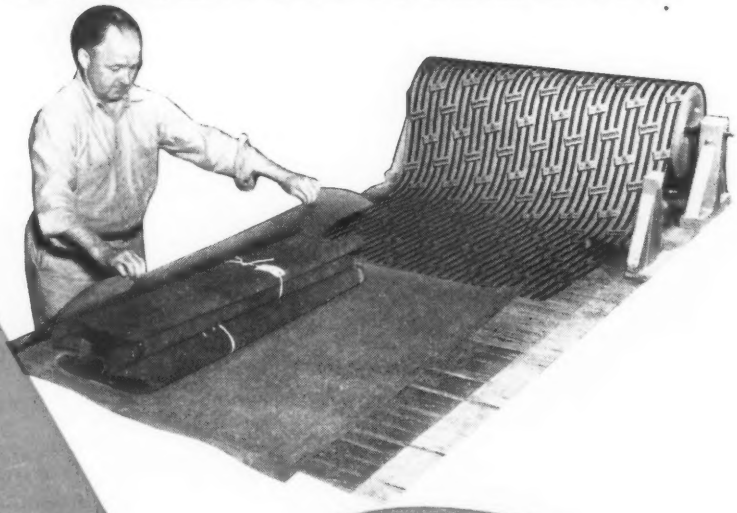

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